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UNITED STATES ENVIRONMENTAL PROTECTION AGENC

726 MINNESOTA AVENUE KANSAS CITY, KANSAS 66101

IN THE MATTER OF:

SYNTEX FACILITY SITE
Verona, Lawrence County, Missouri.

Syntex Agribusiness, Inc., Respondent.

Proceeding under Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622.

Site: Syrtex-Verone ID#: M6 D007452154
Break: 10.6
Other: 7-18-97

U.S. EPA Region VII
CERCLA
Docket No. VII-97-F-0016



160465 SUPERFUND RECORDS

ADMINISTRATIVE ORDER ON CONSENT FOR RESPONSE ACTIONS

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Respondent.

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ADMINISTRATIVE ORDER ON CONSENT FOR RESPONSE ACTIONS

INTRODUCTION I.

This Administrative Order on Consent for Response Actions ("Consent Order") is entered into voluntarily by Region VII of the United States Environmental Protection Agency ("EPA") and Syntex Agribusiness, Inc. ("Respondent"). This Consent Order provides for the implementation of a ground water monitoring program by Respondent at the Syntex Facility Site located in Verona, Lawrence County, Missouri, the implementation of a removal action by Respondent at the Syntex Facility Site to address polychlorinated biphenyl ("PCB") contamination, and the reimbursement of response costs incurred by the United States as described herein.

II. JURISDICTION

- 2. This Consent Order is issued pursuant to the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622. This authority was delegated to the Administrator of EPA by Executive Order 12580, January 23, 1987, 52 Fed. Reg. 2923 (1987), and further delegated to the EPA Regional Administrators on September 13, 1987, by EPA Delegation Nos. 14-14-A and 14-14-C. This authority was subsequently delegated to the Director of the Superfund Division.
- 3. This Consent Order requires Respondent to implement a ground water monitoring program at the Site as described herein in accordance with the Record of Decision-Ground Water Operable Unit #2, issued by EPA in May 1993. This Consent Order also requires Respondent to develop and implement a Removal Action Work Plan to address PCB contamination in a portion of the Site as described in EPA's July 1997 Removal Action Memorandum, attached hereto as Appendix 4 and incorporated by reference into this Consent Order.
- 4. The EPA has notified the state of Missouri of this action pursuant to the requirements of CERCLA Section 106(a).
- 5. Respondent agrees to comply with and be bound by the terms of this Consent Order. Respondent's participation in this Consent Order shall not constitute or be construed as an admission of liability or of EPA's findings or determinations

contained in this Consent Order, except in a proceeding to enforce the terms of this Consent Order. In any action by EPA or the United States to enforce the terms of this Consent Order, Respondent consents to and agrees not to contest EPA's authority or jurisdiction to issue or to enforce this Consent Order, and agrees not to contest the basis or validity of this Consent Order or its terms.

III. PARTIES BOUND

- 6. This Consent Order applies to and is binding upon EPA and upon Respondent, and upon Respondent's receivers, trustees, successors and assigns.
- 7. Any change in ownership or corporate status of Respondent, including but not limited to any transfer of assets or real or personal property, shall not alter Respondent's responsibilities under this Consent Order. Respondent shall provide a copy of this Consent Order to any subsequent owner or successor before ownership rights or stock or assets in a corporate acquisition are transferred.
- 8. Respondent shall provide a copy of this Consent Order to each contractor, subcontractor, laboratory and consultant retained to conduct any Work performed under this Consent Order within twenty (20) days after the effective date of this Consent Order or the date of retaining their services, whichever is later. Respondent shall require as a condition in all such contracts or other agreements that the contractor, subcontractor, laboratory or consultant shall comply with all applicable

requirements of this Consent Order. Notwithstanding the terms of any contract or other agreement, Respondent is responsible for compliance with this Consent Order and for ensuring that its subsidiaries, employees, contractors, consultants, subcontractors and other representatives comply with the requirements of this Consent Order. With regard to the activities undertaken pursuant to this Consent Order, each contractor and subcontractor shall be deemed to be related by contract to Respondent within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

IV. <u>DEFINITIONS</u>

- 9. Unless otherwise expressly provided herein, terms used in this Consent Order that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or its implementing regulations.

 Whenever terms listed below are used in this Consent Order or in the documents attached to this Consent Order or incomporated by reference into this Consent Order, the following definitions shall apply:
- A. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 et seg.
- B. "Consent Order" shall mean this Administrative
 Order on Consent for Response Actions and all appendices attached
 hereto. In the event of conflict between this Consent Order and
 any appendix and any provision of any other agreement, order or
 writing, the terms and conditions of this Consent Order shall
 control.

- C. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working Day" shall mean a day other than a Saturday, Sunday or Federal holiday. In computing any period of time under this Consent Order, where the last day would fall on a Saturday, Sunday or Federal holiday, the period shall extend until the end of the next working day.
- D. "Dioxin" or "TCDD" shall mean 2,3,7,8 tetrachlorodibenzo-p-dioxin.
- E. "EPA" shall mean the United States Environmental Protection Agency and any successor department or agency of the United States.
- F. "Implementation Plan" or "ID" shall mean the statement of work for the ground water monitoring program required by this Consent Order and identified as Appendix 2, attached to and incorporated by reference into this Consent Order.
- G. "Interim Response Costs" shall mean all costs that concern operable unit number 2 ("OU #2") and the Removal Action, including direct and indirect costs: (i) paid by the EPA in connection with Site from February 19, 1997 through the effective date of this Consent Order; or (ii) incurred prior to the effective date of this Consent Order, but paid by EPA after that date.
- H. "MDNR" shall mean the Missouri Department of Natural Resources.
- I. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan

- promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, including any amendments thereto.
 - J. "Paragraph" shall mean a portion of this Consent Order identified by an Arabic numeral, or an upper case letter.
 - K. "Parties" shall mean EPA and the Respondent.
 - L. "Past Response Costs" shall mean all costs that concern OU #2, including but not limited to direct and indirect costs, that EPA paid in connection with the Site from May 28, 1995 through February 18, 1997.
 - M. "PCBs" shall mean polychlorinated biphenyls as defined in 40 C.F.R. Part 761.
- N. "Record of Decision" or "ROD" shall mean EPA's decision document signed May 7, 1993 (Record of Decision-Ground Water Operable Unit #2), in which EPA determined that ground water monitoring was necessary at the Syntex Facility Site in Verona, Missouri to monitor the release or potential release of hazardous substances in the ground water at the Site.
 - O. "Removal Action" shall mean all activities

 necessary to plan and implement a response action to address PCB

 contamination at a portion of the Site as described in EPA's July

 1997 Removal Action Memorandum (Appendix 4) and in accordance

 with the Removal Action Statement of Work (Appendix 3).
 - P. "Removal Action Statement of Work" shall mean the statement describing the Removal Action to be implemented at the Site pursuant to this Consent Order and identified as Appendix 3, attached to and incorporated by reference into this Consent Order.

- "Response and Oversight Costs" shall mean all costs that the United States incurs in connection with this Consent Order, provided such costs were incurred as a result of actions not inconsistent with the NCP. Such costs include, but are not limited to, costs incurred in connection with reviewing or developing plans, reports and other items pursuant to this Consent Order, verifying the Work, or otherwise implementing, overseeing or enforcing the provisions of this Consent Order; such costs include but is not limited to payroll costs, indirect costs, contractor costs, travel costs, laboratory costs, interagency agreement costs, and costs incurred pursuant to Section VII (Order). Response and Oversight Costs also include all Interim Response Costs and all interest on the Past Response Costs that may accrue as a result of Respondent's failure to timely pay Past Response Costs in accordance with Paragraph 40 of this Consent Order.
- R. "Section" shall mean a portion of this Consent Order identified by a Roman numeral.
- S. "Site" and "Syntex-Verona Facility" shall mean the Syntex Facility Superfund Site located in Verona, Lawrence County, Missouri, depicted on the map which is identified as Appendix 1, attached to and incorporated by reference into this Consent Order. Syntex Agribusiness, Inc. has sold a major portion of the Site to DuCoa, L.P.
 - T. "State" shall mean the state of Missouri.
- U. "Waste Material" shall mean any hazardous substance under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

V. "Work" shall mean all activities Respondent is required to perform under this Consent Order, including any activity required to be undertaken pursuant to the terms and conditions of this Consent Order, the Implementation Plan (Appendix 2) and the Removal Action SOW (Appendix 3), except the record retention requirements of Paragraph 32 of this Consent Order.

V. FINDINGS OF FACT

- 10. Respondent is a Delaware corporation authorized to do business in the state of Missouri.
- 11. Respondent was the owner and operator of a plant which is commonly referred to as the Syntex Agribusiness, Inc., Verona Plant, located on First Street, Verona, Lawrence County, Missouri. The Site covers approximately 180 acres.
- 12. Hoffman-Taff, Inc. ("Hoffman-Taff") was the owner of the Site in the 1960's. Hoffman-Taff produced 2,4,5-trichlorophenoxy-acetic acid (2,4,5-T) at the Site for the U.S. Army as part of the production of the defoliant commonly known as Agent Orange. In 1969, Hoffman-Taff leased a portion of a building at the Site to Northeastern Pharmaceutical and Chemical Company ("NEPACCO") for the production of hexachlorophene.
- 13. In 1969, Respondent purchased the Site from Hoffman-Taff. Respondent maintained the lease with NEPACCO until 1972.
- 14. The production of 2,4,5-T and hexachlorophene involved the intermediate production of 2,4,5-trichlorophenol ("TCP") and the potential formation of 2,3,7,8 tetrachlorodibenzo-p-dioxin

- ("dioxin"). In the course of purifying the hexachlorophene, still bottom wastes were created, which would have collected the TCP and dioxin. These waste streams were managed in storage tanks and lagoons located at the Site.
 - 15. The Site is currently an active manufacturing plant.
 - 16. The Spring River traverses the Site. Most of the Site is located in the 100 year floodplain of the Spring River.
- 17. The Site overlies alluvial deposits which rest unconformably upon an eroded carbonate bedrock surface. The alluvium consists of fine to coarse-grained clastic sediment ranging from 10 to 30 feet in thickness. The alluvial deposits are underlain by carbonate bedrock which consists of fractured cherty limestone. The Northview Shale which underlies the carbonate bedrock, acts as a confining bed for vertical ground water movement in this area. The thickness of the shallow carbonate bedrock is controlled largely by the position of its erosional surface, and is approximately 90 feet in thickness below the Site. There is no confining layer between the alluvium and the shallow bedrock suggesting that these two units act as a single aquifer.
 - 18. The direction of ground water flow in the alluvial/shallow bedrock aquifer is in a north-northwesterly direction beneath the Site.
 - 19. In September 1983, Respondent and EPA entered into a Consent Agreement and Order by which Respondent was required to:

 (A) to fully define the nature and extent of environmental

contamination by certain hazardous wastes and/or substances at the Syntex-Verona Facility and at certain portions of the adjoining property; and (B) to formulate, implement and monitor a practical plan for removal or other remedial action to abate the actual or threatened release of such hazardous substances from the Facility and certain portions of the adjoining property which may present an imminent and substantial endangerment to the public health or welfare or the environment.

- 20. In 1985, collection of ground water monitoring data began from ten ground water monitoring wells installed at the Site (Wells MW-1 through MW-10).
- 21. In 1988, EPA issued a Record of Decision for operable unit number one ("OU #1") addressing the contaminated soils and equipment at the Site. This Record of Decision included requirements for additional ground water monitoring.
- 22. An implementation plan for OU #1 was finalized in July 1988 with an additional addendum in May 1989. Under this plan, contaminated soils were successfully excavated and treated, or capped, and contaminated equipment was successfully addressed. In addition, twelve new ground water monitoring wells were installed at the Site, and two years of ground water monitoring data were collected in order to better characterize the ground water contamination and identify and monitor potential ground water problems with the Site.
- 23. In August 1992, a Remedial Investigation ("RI") Report was completed for operable unit number two ("OU #2") addressing

the ground water at the Site. Analytical results of this investigation indicated the presence of the following compounds in the ground water above their maximum contaminant levels ("MCLs"):

<u>Contaminant</u>	MCLs (mg/l)	Maximum Concentration Detected (mg/l)
COTTO CHILLIANTO	()/ = /	
• bis(2-Ethylhexyl)	,	
phthalate	0.006	0.019
 dichloromethane 	0.005	0.98
 trichloroethene 	0.005	0.013
 tetrachloroethene 	0.005	0.320
 heptachlor epoxide 	0.0002	0.00081
• lindane	0.0002	0.00025
 1,2-dichloroethane 	0.005	0.643
 1,4-Dichlorobenzene 	0.075	0.318
• 1,1,1-trichloroethane	0.2	0.231
• antimony	0.006	0.0634
• arsenic	0.05	0.2
• barium	2.0	21.2
• cadmium	0.005	0.16
• chromium	0.1	64.3
• fluoride	4.0	20.0
• lead	0.015 (at tap)	34.0
• nitrate	1.0	2186.4
• selenium	0.05	0.05

- 24. Based on the RI for OU #2, EPA issued a ROD for OU #2 in May 1993. The ROD for OU #2 called for no further action for the ground water at the Site with the exception of the implementation of an additional two year ground water monitoring program. At the end of the two years of ground water monitoring, an assessment of the protectiveness of the remedy would be conducted.
- 25. In April 1997, as part of a trenching operation near a small electrical building at the Site, soil was excavated for the purpose of burying elevated power lines. Since the electrical

building had historically stored PCB transformers and leaks from the transformers had occurred, a composite sample was taken of the excavated soil to determine the presence or absence of PCB contamination. Analysis of the soil sample indicated the presence of PCBs at 1000 parts per million.

26. In response to the discovery of PCB contamination, referred to in the preceding Paragraph, EPA issued a Removal Action Memorandum on July 1997 (Appendix 4) identifying the response actions necessary to address the PCB contamination.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

- 27. Based on the Findings of Fact set forth above, and the Administrative Record supporting the ROD and the response actions required by this Consent Order, EPA has determined that:
 - A. The Syntex Facility Superfund Site located in Verona, Missouri is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
 - B. Dioxin and the substances identified in Paragraphs 23 and 25 above are each a "hazardous substance" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
 - C. Respondent is a "person" as defined by and within the meaning of Sections 101(21) and 107(a)(3) of CERCLA, 42

 U.S.C. §§ 9601(21) and 9607(a)(3).
 - D. Respondent was the owner and/or operator of the facility as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

- E. Respondent is a liable party under Sections 104, 106(a), 107 and 122 of CERCLA, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622.
- F. The presence of hazardous substances at the Site or the past, present or potential migration of hazardous substances currently located at or emanating from the Site constitute actual and/or threatened "releases" as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- G. The actual or threatened release of hazardous substances at and from the Site may present an imminent and substantial endangerment to the public health, welfare or the environment within the meaning of CERCLA Section 106(a).
- H. The actions required by this Consent Order are necessary to protect the public health or welfare or the environment, and are in the public interest and consistent with CERCLA and the NCP, 42 U.S.C. § 9622(a).

VII. ORDER

Based on the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record for this Site, it is hereby ORDERED AND AGREED that Respondent shall comply with the following provisions, including but not limited to all appendices to this Consent Order and all documents incorporated by reference into this Consent Order, and shall perform the following actions:

- 28. Designation of Contractors and Subcontractors.
- A. Respondent shall implement the ground water monitoring program as outlined in the Implementation Plan

(Appendix 2) attached to this Consent Order, and/or implement the Removal Action, itself, or retain a qualified prime contractor to implement the ground water monitoring program and/or the Removal Action. Within twenty (20) days of the effective date of this Consent Order and before the Work outlined below begins, Respondent shall notify EPA in writing of the names, titles and qualifications of its personnel, or the names, titles and qualifications of the prime contractor personnel. If EPA does not disapprove of the prime contractor or of Respondent's choice of itself to perform the Work pursuant to Paragraph 28.C of this Section, EPA shall provide to Respondent a written notification authorizing Respondent to proceed (Authorization to Proceed).

- B. Respondent shall also notify EPA of the name(s) and qualifications of any other contractor or subcontractor retained to perform Work under this Consent Order at least twenty (20) working days prior to commencement of Work by such contractor or subcontractor.
- C. The EPA retains the right to disapprove of any, or all, of the contractors and/or subcontractors retained by Respondent, or of Respondent's choice of itself to perform the Work under this Consent Order. If EPA provides written notice to Respondent disapproving a selected contractor, subcontractor or the Respondent and the notice states the reasons for such disapproval, Respondent shall propose a different contractor or subcontractor, or notify EPA that it will perform the Work itself, within twenty (20) days of receipt of EPA's written

disapproval. Within thirty (30) days of receipt of EPA's disapproval, Respondent shall notify EPA of the names, titles and qualifications of the replacement contractor or subcontractor personnel or the names, titles and qualifications of Respondent's personnel that will conduct Work required by this Consent Order. If EPA does not disapprove of a replacement prime contractor or of Respondent's choice of itself to perform the Work, EPA shall provide to Respondent a written notification authorizing Respondent to proceed (Authorization to Proceed).

- D. During the course of implementing the ground water monitoring program and the Removal Action, Respondent shall notify EPA in writing of any changes or additions in the personnel used to carry out such Work, providing their names, titles and qualifications. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.
 - E. Any objection Respondent may have EPA disapproval issued under this Paragraph 28 shall be about to the provisions of Section XI (Dispute Resolution) of this Consent Order.

29. Project Coordinators.

A. The Project Coordinator designated by each Party shall each be responsible for the administration of all activities required by his/her Party under the terms of this Consent Order. To the maximum extent possible, all communications by mail shall be directed between the Project

Coordinators with copies to any additional persons as each may designate. EPA has designated Steven L. Sanders as its Project Coordinator. Respondent has designated Nancy Luxton as its Project Coordinator. Communications between Project Coordinators include, but are not limited to, all documents, reports, approvals and other correspondence submitted under this Consent Order.

- B. EPA and Respondent each have the right to change their respective designated Project Coordinator. The other party must be notified in writing at least twenty (20) days prior to the change.
- C. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager and On-Scene Coordinator by the NCP. In addition, EPA's Project Coordinator shall have the authority consistent with the NCP to halt any Work required by this Consent Order and to take any necessary response action when he/she determines that conditions at the Shall may present an endangerment to public health or welfare or the environment. The absence of the EPA Project Coordinator from the Site shall not be cause for the stoppage or delay of Work under this Consent Order.
- D. All written documents required by this Order shall be directed as follows:
 - i. Two copies of each document shall be submitted to:

Steven L. Sanders, EPA Project Coordinator Superfund Division U.S. Environmental Protection Agency, Region VII 726 Minnesota Avenue Kansas City, Kansas 66101 ii. One copy of all documents shall be directed to:

Nancy Luxton Syntex Agribusiness, Inc. P.O. Box 1246 Springfield, Missouri 65801

iii. Two copies of each document shall be submitted to:

Jerry Foster Hazardous Waste Program, 13th Floor Missouri Department of Natural Resources P.O. Box 176, 205 Jefferson Street Jefferson City, Missouri 65101

30. Work to be Performed.

A. Ground Water Monitoring Program

i. <u>Implementation Plan</u>.

a. Within thirty (30) days of receipt of an Authorization to Proceed issued by EPA pursuant to Paragraph 28 of this Consent Order, Respondent shall initiate the implementation of the activities outlined in the Implementation Plan ("IP" or "Implementation Plan"), Appendix 2 to this Consent Order, in accordance with the schedules set forth in the IP. The IP provides a description of the tasks to be performed to implement the ground water monitoring program, including the performance of a geoprobe survey and the installation of at least two additional ground water monitoring wells. The IP includes the name and qualifications of Respondent's proposed Quality Assurance Official. Additionally, the IP includes a schedule for implementing the Work and a schedule for submitting reports generated from information collected in the field. After the effective date of this Consent Order, the schedules contained in

accordance with Section XVIII (Modification) herein.

- Respondent shall implement the ground water monitoring program as outlined in the IP for a two (2) year period after the installation of all ground water monitoring wells required by the IT. At the end of the two (2) year period, the Respondent shall prepa. assessment of the risks associated with the ground water as that the ground water contamination does not pose unaccepas. The EPA will evaluate all monitoring data and the right ent, and shall determine if additional investigations are ne to protect human health, welfare or the environment. The Errory request - that Respondent implement such additional investigations pursuant to Paragraph 47 of this Consent Order. If EPA requests that Respondent implement such additional actions under this Consent Order and Respondent disagrees with the specific actions requested, Respondent may invoke the provisions of Section XI (Dispute Resolution) of this Consent Order with respect to the additional actions requested, including the standards, specifications and schedules requested by EPA. No provision or requirement of this Consent Order shall prevent or be construed as preventing EPA from conducting at any time any additional response action that EPA determines is necessary to protect human health, welfare or the environment.
 - ii. <u>Reporting</u>. In addition to the deliverables set forth in this Consent Order, Respondent shall provide written

quarterly progress reports to EPA on a quarterly basis, or on such other periodic basis as the Parties may agree to in writing. Each progress report shall be submitted to the EPA Project Coordinator by the fifteenth (15th) day of the month following the end of the reporting period beginning with the first guarter after the effective date of this Consent Order. The reports shall be due on the fifteenth (15th) day of January, April, July and October, or such other due date as agreed to in writing by the Parties. At a minimum, with respect to the reporting period, each progress report shall: (a) describe the actions which have been taken to comply with this Consent Order during the reporting period; (b) include all results of sampling, tests, modeling and all other data (including raw data) generated by Respondent or on Respondent's behalf; (c) describe Work planned for the next two reporting periods with schedules relating such Work to the overall project schedule for the ground water monitoring program; and (d) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

iii. <u>Draft Risk Assessment Report</u>. Within sixty (60) days of Respondent's receipt of all the analytical data from the last scheduled sampling event, or within one hundred eighty (180) days of the last scheduled sampling event, whichever occurs first in time, Respondent shall submit to EPA for review and approval a draft Risk Assessment Report as outlined in Paragraph 30.A.i.b above.

iv. Ground Water Monitoring System Final Report.

Within ninety (90) days of Respondent's receipt of EPA's comments to the draft Risk Assessment Report, Respondent shall submit to EPA a Final Report for the Site summarizing the actions taken to comply with this Consent Order. The Final Report shall include the Risk Assessment Report, revised to address EPA's comments, a presentation of the analytical results of all sampling and analysis performed, and accompanying appendices containing all documentation generated in performing the ground water monitoring program Work under this Consent Order. The Final Report shall also include the following certification signed by the person who supervised or directed the preparation of that report:

"Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the Final Report, the information submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

B. Removal Action.

- i. Within thirty (30) days of the effective date of this Consent Order, the Respondent shall submit to EPA for review and approval a Removal Action Work Plan ("RAWP") for performing the actions set forth in the Removal Action Statement of Work, Appendix 3 to this Consent Order.
- ii. The EPA may approve, disapprove, require revisions to, modify or develop the RAWP in accordance with Section VIII (EPA Review of Submissions) of this Consent Order.

 Once approved, approved with modifications, modified or developed

- by EPA, the RAWP, the schedule contained therein, and any subsequent modifications shall become a part of and shall be fully enforceable under this Consent Order. Respondent shall implement the RAWP as finally approved, modified or developed by EPA in accordance with the schedule approved or established by EPA.
 - iii. Respondent should be ify EPA in writing at least ten (10) days prior to performing and on-site Work pursuant to the RAWP that is finally approved, not and or developed by EPA. Respondent shall not commence or under the Removal Action at the Site without prior EPA approvation the RAWP.
- iv. Reporting. In addition to the Removal Action deliverables set forth in this Consent Order, Respondent shall provide written progress reports to EPA on a weekly basis, or on such other periodic basis as the Parties and agree to in writing. Each Removal Action progress report shall ted to the EPA Project Coordinator on the Tuesday immediate ing each reporting period, and shall contain, at a minimum, information described in Task 5, Paragraph 1 of the attached Removal Action Statement of Work (Appendix 3).
 - v. <u>Removal Action Final Report</u>. Within ninety (90) days after completion of the Removal Action required under this Consent Order, Respondent shall submit for EPA review and approval a final report summarizing the Removal Action taken to comply with this Consent Order. The Removal Action Final Report shall conform, at a minimum, to the requirements set forth in

Task 5, Paragraph 2 of the Removal Action Statement of Work,
Appendix 3 to this Consent Order. The Removal Action Final
Report shall also include the following certification signed by a
person who supervised or directed the preparation of that report:

"Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the Final Report, the information submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisons at for knowing violations."

C. Health and Safety Plan.

- Authorization to Proceed issued by EPA pursuant to Paragraph 28 of this Consent Order, Respondent shall submit for EPA review and comment a Health and Safety Plan ("HSP") that ensures the protection of the public and worker health and safety during the performance of the Work related to the Authorization to Proceed that is required by this Consent Order. The HSP shall be prepared in accordance with EPA's current Standard Operating Safety Guide, dated November 1984, updated July 1988. In addition, the HSP shall comply with all current Occupational Safety and Health Administration ("OSHA") requirements including, but not limited to, the regulations found at 29 C.F.R. Part 1910.
 - ii. Respondent shall incorporate all changes to the HSP recommended by EPA that are necessary to meet the requirements of Paragraph 30.C.i above, and implement the plan during the pendency of Work conducted pursuant to this Consent Order.

D. Quality Assurance and Sampling.

i. All sampling and analyses performed pursuant to this Consent Order shall conform to EPA quidance regarding sampling procedures, quality assurance/quality control ("QA/QC"), data validation and chain of custody procedures, and shall be in accordance with the EPA approved Quality Assurance Project Plan as described in the Implementation Plan and the RAWP. Respondent shall ensure that each laboratory it utilizes for the analysis of samples taken pursuant to this Consent Order performs all analyses in accordance with accepted EPA methods. Respondent shall also ensure that each such laboratory participates in a QA/QC program that complies with each applicable EPA guidance. - Respondent shall comply with the following documents as guidance for QA/QC and sampling: "Handbook for Sampling and Sampling Preservation, Preservation of Water and Wastewater, " EPA/600/4-76/049, September 1976; "Preparation Aids for the Development of Category II Quality Assurance Project Plans, " EPA/600/8-91/004, February 1991; "Requirements for Quality Assurance Project Plans for Environmental Data Operations, " EPA QA/R-5, Draft, January 29, 1992; "Test Methods for Evaluating Solid Waste," Third Edition SW-846, 1986; and any other pertinent EPA directive and quidance. The EPA shall determine the applicability and appropriateness of any EPA directive or guidance. If Respondent believes any such determination results in the inconsistent application of an EPA directive or guidance, Respondent may dispute any such determination in accordance with the provisions of Section XI (Dispute Resolution) of this Consent Order.

- ii. Respondent shall provide in contracts with all laboratories utilized by Respondent to conduct Work pursuant to the requirements of this Consent Order that EPA personnel and its authorized representatives are allowed access at all reasonable times to such laboratories. Upon written request by EPA, Respondent shall have the laboratory(s) being utilized by Respondent analyze samples submitted by EPA for the purpose of quality-assurance monitoring under this Consent Order. The IP identifies and the RAWP shall identify the quality assurance and quality control procedures to be followed by all sampling teams and laboratories performing data collection and/or analysis.
- iii. Respondent shall notify EPA in writing not -less than twenty (20) days in advance of any sample collection activity or other significant field event as described in the IP or the RAWP. Upon request by EPA, Respondent shall allow EPA or its authorized representatives to take split and/or duplicate samples of any sample collected by Respondent, its contractor(s), or anyone acting on behalf of Respondent while Work is seen performed pursuant to this Consent Order. The EPA shall have the right to take any additional samples related to the implementation of this Consent Order that it deems necessary.
 - iv. Upon written request by EPA, Respondent shall submit to EPA analytical data for samples collected in connection with this Consent Order that is in its possession. This submission of data is in addition to the periodic reporting requirements and the data shall be submitted to EPA within three

(3) working days of Respondent's receipt of EPA's written request.

31. Access to Property and Information.

Respondent shall provide access to EPA and its authorized representatives to the Site and off-site areas to which access is necessary to conduct Work pursuant to the requirements of this Consent Order. Subject to Paragraph 32.B and C of this Consent Order, Respondent shall also provide EPA and its authorized representatives access to all records and documentation that is possessed or controlled by Respondent, or its contractors, subcontractors, laboratories or consultants related to this Consent Order and the activities conducted - pursuant to this Consent Order. Such access shall include providing EPA and its authorized representatives the authority to enter and freely move about all areas for the purposes of: (i) inspecting conditions, activities, the results of activities, records, operating logs and contracts related to Work at the Site or Work by Respondent and its contractor; (ii) reviewing the progress of Respondent in carrying out the terms of this Consent Order; (iii) conducting tests relating to the implementation of this Consent Order as EPA or its authorized representatives deem necessary for purposes of this Consent Order; (iv) using a camera, sound recording device or other documentary type equipment in areas where such equipment does not present a health and safety danger; and (v) verifying the data submitted to EPA by Respondent. Subject to Paragraph 32.B and C of this Consent

Order, Respondent shall allow EPA and its authorized representatives to inspect and copy all records, files, photographs, documents, sampling and monitoring data and other writings related to Work undertaken in carrying out this Consent Order that are possessed or controlled by Respondent, its contractors, subcontractors, laboratories or consultants. Such unrestricted access shall continue until such time as EPA has issued both Notices of Completion as set forth in Section XIX of this Consent Order. Nothing herein shall be interpreted as limiting or affecting EPA's right of entry or inspection authority under Federal law.

B. To the extent that property to which access is required for the implementation of Work under this Consent Order is owned or controlled by persons other than Respondent, Respondent shall obtain, or use its best efforts to obtain, access agreements from such persons for itself, as well as for EPA and its representatives for the purposes set forth in Paragraph 31.A, within thirty (30) days after the effective date of this Consent Order. Copies of such access agreements shall be provided to EPA prior to Respondent's initiation of field activities. If Respondent has not obtained such access agreements within the above-referenced thirty (30) day period, Respondent shall immediately notify EPA in writing that it has been unable to obtain such access, despite Respondent's best efforts. In the written notification, Respondent shall describe its efforts to obtain access. EPA may then assist Respondent in

gaining access to the extent necessary to effectuate the Work required herein, utilizing such means as EPA deems appropriate.

Respondent shall reimburse EPA for all costs, including attorney's fees, incurred by the United States in obtaining such access for Respondent in accordance with Section IX

(Reimbursement of Costs) of this Consent Order.

- 32. Record Retention, Documentation and Availability of Information.
- A. Respondent shall preserve all documents and information relating to Work performed under this Consent Order, or relating to the hazardous substances found on or released from the Site, for ten (10) years following issuance of both Notices of Completion by EPA pursuant to Section XIX of this Consent Order. Respondent shall acquire and retain copies of all such documents and information that are in the possession of its employees, agents, accountants, contractors or attorneys. At the end of this ten (10) year period and at least ninety (90) days before any such document or information is scheduled to be destroyed, Respondent shall notify EPA in writing that such documents and information are available to EPA for inspection. Upon EPA's written request, Respondent shall provide the originals or copies of such documents and information to EPA.
- B. Respondent may assert a claim of business confidentiality claim pursuant to 40 C.F.R. § 2.203(b) with respect to part or all of any information submitted to or obtained by EPA pursuant this Consent Order, provided such claim

is allowed by Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). The EPA shall disclose information covered by a business confidentiality claim only to the extent permitted by, and by the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when it is received by EPA, EPA may make the information available to the public without further notice to Respondent. Analytical data and other data specified in CERCLA Section 104(e)(7)(F) shall not be claimed as confidential by Respondent.

C. Respondent may assert that certain documents or records required to be submitted to EPA under this Consent Order are privileged under the attorney-client privilege or are - considered attorney-work product. If Respondent asserts such a privilege in lieu of providing documents, Respondent shall provide EPA with the following: (i) the title of the document or record; (ii) the date of the document or record; (iii) the name and title of the author of the document or record; (iv) the name and title of each addressee and recipient; and (v) a description of the subject matter of the document or record. However, no document or record created or generated in satisfaction of the requirements of this Consent Order shall be withheld on the grounds that it is privileged. Any document or record for which Respondent asserts such a privilege shall not be destroyed until Respondent receives written notification from EPA authorizing such destruction, or ninety (90) days from the date EPA receives from Respondent a request for destruction if EPA does not object to such destruction within the ninety (90) day period.

- D. EPA may, at any time, challenge claims of business confidentiality or privilege as provided by law or the Federal Rules of Civil Procedure.
- all actions required under this Consent Order in accordance with all applicable local, state and Federal laws and regulations; except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. § 300.415(i). In accordance with 40 C.F.R. § 300.415(i), all Work required pursuant to this Consent Order shall, to the extent practicable, as determined by EPA considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARS") under Federal environmental, state environmental or facility siting laws.

34. Emergency Response and Notification of Release.

A. If any incident or change in Site conditions occurs as a result of the implementation of activities conducted pursuant to this Consent Order that causes or threatens to cause an additional release of hazardous substances from the Site or an endangerment to the public health, welfare or the environment, Respondent shall immediately take all appropriate action. The Respondent shall take these actions in accordance with all applicable provisions of this Consent Order, including but not limited to the applicable Health and Safety Plan, in order to prevent, abate or minimize such releases or endangerment caused or threatened by the release. Within twenty-four (24) hours of

discovery of such incident or change in Site conditions, Respondent shall also notify by telephone EPA's Project Coordinator or, in his/her unavailability, the Regional Duty Officer, Emergency Response and Removal Branch, EPA Region VII (913-281-0991), of such incident or change in Site conditions. The Respondent shall submit a written report to EPA within seven (7) days after each such release, incident or change in Site conditions setting forth the events that occurred and the measures taken or to be taken to mitigate any release or potential release or endangerment caused or threatened by the release or potential release and to prevent the reoccurrence of such a release or potential release. In the event that EPA -determines that the immediate threat or the unanticipated or changed circumstances warrant changes in the IP (Appendix 2) or the RAWP, EPA reserves the right to modify or amend the IP or the RAWP in writing accordingly. If EPA modifies or amends the IP or the RAWP pursuant to this Paragraph, Respondent may dispute the specific modifications or amendments made, but not EPA's initial determination, pursuant to Section XI (Dispute Resolution) of this Consent Order. Subject to any dispute resolution, Respondent shall implement the IP or the RAWP as modified or amended.

B. The reporting requirements under this Section of the Consent Order are in addition to, not in lieu of, the reporting requirements set forth in Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act ("EPCRA"), 42 U.S.C. § 11001 et seq.

VIII. EPA REVIEW OF SUBMISSIONS

- 35. With respect to all deliverables required to be submitted by Respondent pursuant to this Consent Order, EPA reserves the right to comment on and direct changes in all deliverables, and to modify a resubmission or develop a required deliverable if the resubmission is not approved by EPA. After review of any plan, report or other deliverable which is required to be submitted for approval pursuant to this Consent Order, including resubmissions, EPA shall: (A) approve, in whole or in part, the submission; (B) approve the submission upon specified conditions; (C) disapprove, in whole or in part, the submission, directing Respondent to modify the submission; (D) modify a - résubmission or develop a required deliverable in accordance with Paragraph 38, below; or (E) any combination of the above. EPA will provide in writing the reasons for disapproval of a submission or resubmission. Respondent may object to any such action taken by EPA pursuant to this Paragraph 35 in accordance with Section XI (Dispute Resolution) of this Consent Order.
 - 36. In the event of approval or approval upon conditions by EPA pursuant to Paragraph 35(A) or (B), Respondent shall proceed to take any action required by the plan, report or other deliverable, as approved by EPA subject only to its right to invoke the procedures set forth in Section XI (Dispute Resolution) with respect to the conditions made by EPA.

37. Notice of Disapproval.

A. Within twenty (20) days of receipt of a Notice of Disapproval from EPA pursuant to Paragraph 35(C), or such other

time as agreed upon in writing by the Parties, Respondent shall correct the deficiencies and resubmit the plan, report or other deliverable to EPA for approval. Any stipulated penalties applicable to the resubmission, as provided in Section XIII (Stipulated and Statutory Penalties), shall begin to accrue on the date the resubmission is required to be submitted to EPA, but shall not be payable unless the resubmission is disapproved and modified or the required deliverable is developed by EPA due to a material defect as provided in Paragraph 38.C.

B. Notwithstanding the receipt of a Notice of
Disapproval pursuant to Paragraph 35(C), Respondent shall
proceed, at the direction of EPA, to take any action required by
-any approved portion of the submission. Implementation of any
approved portion of a submission shall not relieve Respondent of
any liability for penalties associated with disapproved portions
of a submission under Section XIII (Stipulated and Statutory
Penalties) of this Consent Order.

38. <u>Resubmissions</u>.

A. In the event that a resubmitted plan, report or other deliverable, or portion thereof, is disapproved by EPA, EPA may again require Respondent to correct the deficiencies, in accordance with the preceding Paragraphs, subject only to Respondent's right to invoke the procedures set forth in Section XI (Dispute Resolution) of this Consent Order. The EPA also retains the right to modify the resubmitted plan, report or other deliverable or develop the required deliverable if the

resubmission contains a material defect and cannot be approved by EPA. The EPA will provide Respondent the reasons for modification or development of a plan, report or other deliverable in writing. Any additional tasks to be performed by Respondent under a plan, report or other deliverable modified or developed by EPA and related to the ground water monitoring program shall be limited to additional investigations as provided by Paragraph 47 of this Consent Order. Respondent shall implement any such plan, report or deliverable as modified or developed by EPA, subject only to Respondent's right to invoke the procedures set forth in Section XI (Dispute Resolution) of this Consent Order.

- B. In the event EPA modifies a resubmission to cure the deficiencies or develops the required plan, report or other deliverable, and EPA determines that the resubmission has or had a material defect, EPA retains the right to seek penalties as provided in Section XIII (Stipulated and Statutory Penalties) of this Consent Order. Any resubmission that is modified or required deliverable that is developed by EPA shall be provided to Respondent.
- C. If upon resubmission, a plan, report or other deliverable is modified or developed by EPA due to a material defect, Respondent shall be deemed to have failed to submit such plan, report or other deliverable in a timely and adequate manner. In this event, any stipulated penalty applicable to the resubmission shall begin to accrue from the date on which the

initial resubmission was originally required. Any such stipulated penalty shall be due and payable in accordance with the provisions of Section XIII (Stipulated and Statutory Penalties), unless Respondent invokes the procedures set forth in Section XI (Dispute Resolution) herein and EPA's disapproval and modification of a resubmission or development of a required deliverable is overturned pursuant to that Section. The provisions of Paragraph 37.B and Section XI (Dispute Resolution) and Section XIII (Stipulated and Statutory Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during dispute resolution. If EPA's disapproval and modification or development is upheld, stipulated penalties shall be paid in accordance with in Section XIII (Stipulated and Statutory Penalties) of this Consent Order.

39. All plans, reports and other deliverables required to be submitted to EPA under this Consent Order shall, upon approval or modification or development by EPA, be enforceable under this Consent Order. In the event that EPA approves, modifies or develops a portion of a plan, report or other deliverable required to be submitted to EPA under this Consent Order, the approved, modified or developed portion shall be enforceable under this Consent Order.

IX. REIMBURSEMENT OF COSTS

40. Past Response Costs.

A. Within sixty (60) days of the effective date of this Consent Order, Respondent shall pay the total sum of

\$63,367.27 to EPA in the manner described below as reimbursement for all Past Response Costs as defined in Section IV of this Consent Order.

B. Payment of Past Response Costs shall be by cashiers or certified check made payable to the "Hazardous Substances Superfund," or by Fedwire Electronic Funds Transfer ("EFT") to the designated wire transfer account for the total amount of Past Response Costs. If payment is made by cashier's or certified check, the check shall include the name of the Site, the Site/Spill identifier number ("0751"), the Docket Number of this Consent Order, and shall be forwarded to:

Mellon Bank
Attn: Superfund Accounting
EPA Region VII
FNMG Section
P.O. Box 360748M
Pittsburgh, Pennsylvania 15251

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If by EFT, payment under this Paragraph shall be designated as "Past Response Costs - Syntex-Verona Superfund Site," and shall reference the payor's name and address, the EPA Site/Spill identifier number ("0751") and the Docket Number of this Consent Order. If payment is made by EFT, the transfer shall be made payable to the "Hazardous Substances Superfund," to the following account:

EPA Account Number 910-9070 ABA # 043000261/Mellon Bank West EPA Region VII, Superfund Accounting Pittsburgh, Pennsylvania

Copies of each check, and any accompanying transmittal letter, or evidence of the EFT, shall be sent simultaneously to the EPA Project Coordinator.

41. Response and Oversight Costs.

- A. Respondent shall reimburse the United States for all Response and Oversight Costs, as defined in Section IV of this Consent Order, incurred by the United States, its employees, agents, contractors, consultants and other authorized representatives in connection with this Consent Order. Following the issuance of this Consent Order, EPA will submit to Respondent on a periodic basis an accounting of all Response and Oversight Costs incurred by the United States during a designated period of Each request for payment shall include an Itemized Cost Summary ("ICS") Report which shall serve as the basis for payment Each ICS Report will include, but is not limited to: - (i) EPA's payroll costs, including the names of the persons charging time to the Site, the pay periods each employee charged time to the Site, the number of hours charged per pay period, and the payroll amounts for each employee per pay period; (ii) EPA's travel costs, including the names of the persons charging travel to the Site and the date of payment of each travel claim charged to the Site; (iii) contractor costs, including dollar amounts paid, dates paid, and invoice numbers for such payments; and (iv) EPA's indirect costs, including the amount computed on the basis of direct labor hours.
 - B. If feasible as determined by EPA, requests for payments of Response and Oversight Costs shall be submitted to Respondent on a semi-annual basis. Failure to submit such a request for payment to Respondent on a semi-annual or other

periodic basis shall not constitute or be construed as a timebar, preventing EPA from seeking reimbursement of such costs under this Section of the Consent Order. Respondent acknowledges the fact that certain costs incurred by EPA during a particular accounting period may not be identified in a request for payment for that accounting period. Such unidentified costs will be included in subsequent requests for payment.

42. Respondent shall, within thirty (30) days of receipt of each billing from EPA, either remit a cashier's or certified check(s), or make payment by EFT to the designated wire transfer account, for the amount of the Response and Oversight Costs identified under Paragraph 41 of this Consent Order. If payment is made by cashier's or certified check, each check shall be made payable to the "Hazardous Substances Superfund" and include the name of the Site, the Site/Spill identifier number ("0751"), the account number and Docket Number of this Consent Order and shall be forwarded to:

Mellon Bank
Attn: Superfund Accounting
EPA Region VII
FNMG Section
P.O. Box 360748M
Pittsburgh, Pennsylvania 15251

If by EFT, payment under this Paragraph shall be designated as "Response and Oversight Costs - Syntex-Verona Superfund Site," and shall reference the payor's name and address, the EPA Site/Spill identifier number ("0751") and the Docket Number of this Consent Order. If payment is made by EFT, the transfer shall be made payable to the "Hazardous Substances Superfund," to the following account:

EPA Account Number 910-9070 ABA # 043000261/Mellon Bank West EPA Region VII, Superfund Accounting Pittsburgh, Pennsylvania

Copies of each check, and any accompanying transmittal letter, or evidence of the EFT, shall be sent simultaneously to the EPA Project Coordinator.

on the sixty-first (61) day after the effective date of this

Consent Order, at a rate established pursuant to Section 107(a)

of CERCLA, 42 U.S.C. § 9607(a), and shall accrue through the date
of payment. Interest on Response and Oversight Costs shall begin
to accrue on the thirty-first (31) day after the date of
Respondent's receipt of a bill for such costs, at a rate
established pursuant to CERCLA Section 107(a), and shall accrue
through the date of payment. Payments of interest made under
this Paragraph shall be in addition to such other remedies or
sanctions available to the United States by virtue of
Respondent's failure to make timely payments under this Section.

44. Cost Disputes.

A. Respondent may dispute, in accordance with Section XI herein, Past Response Costs or all or part of a bill for Response and Oversight Costs submitted under this Consent Order, if Respondent alleges that EPA has made an accounting error, or if Respondent alleges that an action resulting in the expenditure of funds is inconsistent with the NCP, or the provisions of this Consent Order. Any such dispute shall be limited to alleged accounting errors or inconsistencies with the NCP or this Consent Order.

- B. If Respondent disputes any costs identified in an ICS Report pursuant to Paragraph 44.A, Respondent may request from EPA the existing documentation that supports the costs identified in an ICS Report. Subject to existing laws and regulations, EPA shall provide Respondent with such requested cost documentation, including descriptions of tasks performed by certain EPA employees if specifically requested by Respondent and to the extent such information is available to EPA. The costs incurred and paid by EPA in collecting, reviewing and providing such documentation and information to Respondent shall be considered Response and Oversight Costs to be reimbursed by Respondent pursuant to Paragraph 41 of this Consent Order.
- Oversight Costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Respondent shall pay on or before the due date: (A) the full amount of the uncontested amount into the Hazardous Substances Superfund account as specified in Paragraphs 40 or 42 above; and (B) the full amount of all contested costs into an interest-bearing escrow account established by Respondent. Respondent shall simultaneously transmit a copy of each check or evidence of EFT to EPA's Project Coordinator. Respondent shall ensure that the prevailing party or parties in the dispute shall receive the amount upon which they prevailed from the escrow funds plus interest within ten (10) days after the dispute is resolved pursuant to Section XI of this Consent Order.

X. ADDITIONAL WORK

- 46. If at any time during the implementation of the ground water monitoring program or the Removal Action, Respondent identifies a need for additional data for the purposes of this Consent Order, a memorandum documenting the need for additional data shall be submitted to the EPA Project Coordinator within twenty (20) days of identification. The EPA in its discretion will determine whether the additional data will be collected by Respondent and whether it will be incorporated into reports and deliverables. The EPA will provide written notice to Respondent authorizing the collection and reporting of the additional data. If EPA determines that any such additional data should not be collected or incorporated into reports or deliverables required by this Consent Order, Respondent may invoke the provisions of Section XI (Dispute Resolution) of the Consent Order.
- 47. The EPA may determine that in addition to tasks defined in the initially approved Implementation Plan (Appendix 2), other additional investigations may be necessary to ensure that the release or threatened release of hazardous substances in the ground water has been abated. The EPA may require that Respondent conduct additional investigations in addition to that required by the initially approved IP, including any approved modifications to the IP, if EPA determines that such additional Work is necessary. Such Work will be limited to additional investigations including, but not limited to, increased monitoring, installation of additional monitoring wells or a

"combination of the two actions. Respondent shall confirm its willingness to perform the additional Work in writing to EPA within twenty (20) days of receipt of the EPA request to perform such additional Work or Respondent may invoke dispute resolution as set forth in Section XI (Dispute Resolution). Any dispute initiated by Respondent pursuant to this Paragraph shall be limited in scope to the specific tasks, including standards, specifications and schedules, that EPA requests Respondent perform, but shall not apply to EPA's determination that additional Work is necessary at the Site. If there is no dispute or, if Respondent invokes dispute resolution and EPA prevails in the resolution of the dispute, Respondent shall implement the additional Work which EPA determines is necessary. event, the additional Work shall be completed according to the standards, specifications and schedules set forth or approved by EPA in a written modification to the IP or a written work plan supplement. The EPA's review of the written modification to the IP or a written work plan supplement shall be in accordance with Section VIII (EPA Review of Submissions). No provision or requirement of this Consent Order shall prevent or be construed as preventing EPA from conducting at any time any additional response action that EPA determines is necessary to protect human health, welfare or the environment.

XI. DISPUTE RESOLUTION

48. The Parties to this Consent Order shall attempt to resolve, expeditiously and informally, any disagreements

concerning this Consent Order. Unless otherwise expressly provided for in this Consent Order, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Order. Furthermore, only disputes for which dispute resolution has been expressly provided shall be subject to the dispute resolution procedures. Such disputes shall be resolved as described below.

If Respondent objects, in whole or in part, to any disapproval or decision or directive made by EPA pursuant to this Consent Order, Respondent shall notify EPA's Project Coordinator in writing of its objections within twenty (20) days of receipt of such disapproval, decision or directive. Respondent's written objections shall be sent certified mail, return receipt requested and shall define the dispute setting forth the specific points of the dispute, the basis of Respondent's objections, the position Respondent maintains should be adopted as consistent with the requirements of this Consent Order, the factual and legal basis for Respondent's position, and all matters Respondent considers necessary for resolution of the dispute. The EPA and Respondent shall then have an additional twenty (20) days from EPA's receipt of Respondent's objections to attempt to resolve the dispute. Any agreement reached by the Parties pursuant to this Section shall be in writing, signed by each Party, and shall upon signature of both Parties be incorporated into and become an enforceable element of this Consent Order.

If the Parties are unable to reach agreement within the above-referenced twenty-day period, the position advanced by EPA shall be considered binding upon Respondent unless Respondent submits a written request for a Dispute Determination by EPA Region VII's Regional Judicial Officer ("RJO"), as defined in 40 C.F.R. Section 22.04(b), within twenty (20) days following the conclusion of the twenty-day period referred to in Paragraph 48.A. For purposes of any dispute resolution proceeding, the Regional Judicial Officer and the Parties shall be subject to the prohibition on ex parte communications as provided in 40 C.F.R. § 22.08. Respondent's written request shall include any factual data, analysis or opinion supporting its position, and any supporting documentation relied upon by Respondent. The EPA shall file a response, if any, to Respondent's written request within twenty (20) days after the filing of Respondent's written request. The Parties may submit other documents with the approval of the RJO. All documents submitted by the Parties under this Paragraph shall be sent to:

Regional Hearing Officer
Office of Regional Counsel
Region VII
U.S. Environmental Protection Agency
726 Minnesota Avenue
Kansas City, Kansas 66101

Copies of all such documents shall also be served on the other Party. The RJO may require additional submissions or conduct such other proceedings as necessary to issue a Dispute Determination. Immediately following receipt of any such Dispute Determination, Respondent shall proceed in accordance with the

RJO's decision regarding the matter in dispute regardless of whether Respondent agrees with the decision.

- C. If Respondent does not agree to perform, or does not actually perform the Work in accordance with the RJO's Dispute Determination, EPA reserves the right in its sole discretion to conduct the Work itself and to seek reimbursement from Respondent, to seek enforcement of the decision, to seek stipulated penalties or to seek any other appropriate relief.
- 49. The existence of a dispute as defined herein and EPA's consideration of such matters as placed in dispute shall not excuse, toll or suspend any compliance obligation or deadline required pursuant to this Consent Order during the pendency of the dispute resolution process.
- may be applicable to a disputed matter under this Order shall be stayed as of the tenth (10th) day after the RJO receives

 Respondent's written request for a Dispute Determination pursuant to Paragraph 48.B of this Consent Order. Such stay of the accrual of penalties and interest shall continue until five (5) days after Respondent's receipt of the RJO's Dispute

 Determination issued pursuant to Paragraph 48.B of this Consent Order. In consideration of such factors and the extent to which Respondent prevailed in the dispute resolution process, the issues of whether and in what amounts Respondent shall be liable for stipulated penalties or interest which accrued during or on account of the dispute resolution process will be resolved by

written agreement of the Parties or, if no agreement is reached by the Parties, by the RJO. Payment of penalties and interest is stayed pending such resolution.

51. Except as otherwise may be provided in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h), and notwithstanding any other provisions of this Consent Order, no action or decision by EPA, including without limitation decisions of the RJO under this Consent Order, shall constitute final Agency action giving rise to any rights to judicial review prior to EPA's initiation of judicial action to compel Respondent's compliance with the requirements of this Consent Order.

XII. FORCE MAJEURE

defined as any event arising from causes beyond the control of Respondent and of any entity controlled by Respondent, including but not limited to its contractors and subcontractors, that delays or prevents the timely performance of any obligation under this Consent Order, notwithstanding Respondent's best efforts to fulfill the obligation. The requirement that Respondent exercise "best efforts" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event as it is occurring and following the potential force majeure event, such that the delay is minimized to the greatest extent practicable. Examples of events that are not force majeure events include, but are not limited to, increased costs or expenses of any Work to be

performed under this Consent Order or the financial difficulty of Respondent to perform such Work.

- If any event occurs or has occurred that may delay the performance of any obligation under this Consent Order, whether or not caused by a <u>force majeure</u> event, Respondent shall notify by telephone the Project Coordinator or, in his/her absence, the Superfund Division Director, Region VII, within forty-eight (48) hours of when Respondent knew or should have known that the event might cause a delay. Within ten (10) days thereafter, Respondent shall provide in writing the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to mitigate the effect of the delay; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare or the environment. Respondent shall exercise best efforts to avoid or minimize any delay and any effects of a delay. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of force majeure, unless otherwise agreed to by EPA.
- 54. If EPA agrees that the delay or anticipated delay is attributable to a <u>force majeure</u> event, the time for performance of the obligations under this Consent Order that are directly affected by the <u>force majeure</u> event shall be extended by agreement of the Parties pursuant to Section XVIII (Modification) for a period of time not to exceed the actual duration of the

delay caused by the <u>force majeure</u> event. An extension of the time for performance of the obligation directly affected by the <u>force majeure</u> event shall not, of itself, extend the time for performance of any subsequent obligation.

- delay has been or will be caused by a <u>force majeure</u> or does not agree with Respondent on the length of the extension, the issue shall be subject to the procedures set forth in Section XI (Dispute Resolution) of this Consent Order. In any such proceeding, to qualify for a <u>force majeure</u> defense, Respondent shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a <u>force majeure</u> event, that the duration of the delay was or will be warranted under the circumstances, that Respondent did exercise, or is exercising, due diligence by using its best efforts to avoid and mitigate the effects of the delay and that Respondent complied with the requirements of Paragraph 53 above.
- 56. Should Respondent carry the burden set forth in Paragraph 55, the delay at issue shall be deemed not to be a violation of the affected obligation of this Consent Order.

XIII. STIPULATED AND STATUTORY PENALTIES

57. For each day, or portion thereof, that Respondent fails to submit a deliverable in a timely manner, resubmits a deliverable that has a material defect, or otherwise fails to perform in accordance with any requirement of this Consent Order, Respondent shall be liable for stipulated penalties. Unless

to accrue on the day after performance is due or the day a violation occurs, and shall continue to accrue through the final day of correction of the noncompliance or completion of the activity. Where a revised submission by Respondent is required, stipulated penalties shall accrue until a satisfactory deliverable is submitted to EPA or the resubmitted deliverable is modified or developed by EPA. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Order.

- 58. For a resubmitted deliverable determined by EPA to contain a material defect, the following stipulated penalties shall accrue in the amount of: (A) \$500.00 per day, per violation, for the first seven (7) days of noncompliance; (B) \$1,000.00 per day, per violation, for the eighth (8th) through fourteenth (14th) day of noncompliance; (C) \$2,000.00 per day, per violation, for the fifteenth (15th) day through the thirtieth (30th) day of noncompliance; and (D) \$3,000.00 per day, per violation, for all violations lasting beyond thirty (30) days.
- 59. Except for progress reports, failure to submit an original and any revised deliverable in a timely manner and failure to comply with any other provision in accordance with an EPA-approved or established schedule under this Consent Order, including the Implementation Plan and the RAWP, stipulated penalties shall accrue in the amount of: (A) \$500.00 per day,

- per violation, for the first seven (7) days of noncompliance;
 (B) \$1,000.00 per day, per violation, for the eighth (8th)
 through fourteenth (14th) day of noncompliance; (C) \$2,000.00 per
 day, per violation, for the fifteenth (15th) day through the
 thirtieth (30th) day of noncompliance; and (D) \$3,000.00 per day,
 per violation, for all violations lasting beyond thirty (30)
 days.
 - 60. For failure to submit timely and/or adequate progress reports, stipulated penalties shall accrue in the amount of:

 (A) \$250.00 per day, per violation, for the first seven (7) days of noncompliance; (B) \$500.00 per day, per violation, for the eighth (8th) through thirtieth (30th) day of noncompliance; and (C) \$1,000.00 per day, per violation, for the thirty-first (31st) and each succeeding day of noncompliance thereafter.
 - 61. Following EPA's determination that Respondent has failed to comply with a requirement of this Consent Order, EPA will provide Respondent written notice for violations that are not based on timeliness; nevertheless, penalties shall accrue from the day a violation commences. The EPA may send the Respondent a written demand for payment of the penalties. However, stipulated penalties shall accrue regardless of whether EPA has notified the Respondent of a violation.
 - 62. Payment of a stipulated penalty owing under this Section shall be due within thirty (30) days of receipt by Respondent of a written demand by EPA for payment, unless Respondent invokes the procedures under Section XI (Dispute

Resolution) of this Consent Order. Respondent shall pay interest on the balance of any unpaid stipulated penalty, interest beginning to accrue at the end of the above-referenced thirty (30) day period at the rate established by the Department of Treasury pursuant to 30 U.S.C. § 3717.

63. All penalties shall be paid by Respondent either by certified or cashier's check or by EFT to the designated wire transfer account. If by certified or cashier's check, the check shall be made payable to the Treasurer of the United States, and shall be remitted to:

. . -.:

Mellon Bank
Attn: Superfund Accounting
EPA Region VII
FNMG Section
P.O. Box 360748M
Pittsburgh, Pennsylvania 15251

All payments by check by Respondent shall reference the Syntex Facility, Verona, Missouri Site, the Site/Spill identifier number ("0751"), the account number, the title and docket number of this Consent Order, and shall indicate the payment is for penalties. If by EFT, payment under this Paragraph shall be designated as "Stipulated Penalties - Syntex-Verona Superfund Site," and shall reference the payor's name and address, the EPA Site/Spill identifier number ("0751") and the Docket Number of this Consent Order. If payment is made by EFT, the transfer shall be made payable to the "Treasurer of the United States," to the following account:

EPA Account Number 910-9070 ABA # 043000261/Mellon Bank West EPA Region VII, Superfund Accounting Pittsburgh, Pennsylvania

- A copy of each check and transmittal letter, or evidence of the EFT, shall be forwarded to the EPA Project Coordinator.
- of stipulated penalties demanded by EPA by invoking the procedures contained in Section XI (Dispute Resolution) of this Consent Order. Penalties shall accrue in accordance with Paragraph 50 of this Consent Order, but need not be paid during the dispute resolution period. To the extent Respondent does not prevail upon completion of dispute resolution, the disputed stipulated penalties, determined to be owing under Paragraph 50 herein, shall be paid to EPA within thirty (30) days of Respondent's receipt of the Dispute Determination issued pursuant to Section XI of this Consent Order.
 - Onited States may institute proceedings to collect the penalties, as well as interest. The stipulated penalty provisions set forth in this Section do not preclude EPA from pursuing any other remedy or sanction which may be available to EPA by reason of Respondent's failure to comply with any of the requirements of this Consent Order, including but not limited to EPA conducting all or part of the ground water monitoring program or the Removal Action. However, EPA may not seek additional monetary penalties for an alleged violation of this Consent Order for which stipulated penalties have been demanded by EPA and paid by Respondent under this Consent Order.

- 66. The payment of stipulated penalties shall not alter in any way Respondent's obligations to complete performance of the Work under this Consent Order.
- 67. Violation of any provision of this Consent Order, other than violations for which stipulated penalties have been demanded by EPA and paid by Respondent under the provisions of this Consent Order, may subject Respondent to civil penalties of up to \$25,000 per violation, per day, as provided in Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1). Respondent may also be subject to punitive damages in an amount up to three times the amount of any cost incurred by the United States as a result of such violation, as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Should Respondent violate this Consent Order or any portion thereof, EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or seek judicial enforcement of this Consent Order pursuant to CERCLA Section 106.

XIV. COVENANT NOT TO SUE AND RESERVATION OF RIGHTS

68. Covenant Not To Sue.

A. In consideration of the actions that will be performed and the payments that will be made by Respondent under the terms of this Consent Order, and except as otherwise specifically provided in Paragraph 69 of this Section, EPA covenants not to sue or take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for performance of the Work and for

recovery of Past Response Costs and Response and Oversight Costs. as those costs are defined in Section IV of this Consent Order. With respect to the Removal Action, these covenants not to sue shall take effect upon the issuance of the EPA notice referred to in Paragraph 84.A of Section XIX (Notice of Completion), or after Respondent has paid all undisputed requests by EPA for Response and Oversight Costs related to the Removal Action, or the resolution of any disputed Response and Oversight Costs related to the Removal Action pursuant to Section XI (Dispute Resolution), whichever occurs later. With respect to the ground water monitoring program under Paragraph 30.A, these covenants not to sue shall take effect upon the date of issuance of the EPA - notice referred to in Paragraph 84.B of Section XIX (Notice of Completion), or after Respondent has paid all undisputed requests by EPA for Past Response Costs and Response and Oversight Costs related to the ground water monitoring program, or the resolution of any disputed Past Response Costs and Response and Oversight Costs related to the ground water monitoring program pursuant to Section XI (Dispute Resolution), whichever occurs later.

- B. The above covenants not to sue are conditioned upon the complete and satisfactory performance by Respondent of its obligations under this Consent Order. The covenants not to sue extend only to Respondent and do not extend to any other person.
- 69. EPA General Reservation of Rights. The covenants not to sue set forth above do not pertain to any matters other than those expressly specified in Paragraph 68. The EPA reserves, and

this Consent Order is without prejudice to, all rights against

Respondent with respect to all other matters, including but not

limited to, the following.

- A. Nothing herein shall limit the power and authority of EPA or the United States to take, direct or order all actions necessary to protect public health, welfare or the environment, or to prevent, abate or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Consent Order or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law, including additional ground water response actions to address threats or potential threats to human health, welfare or the environment.
 - B. Subject to the covenant not to sue in Paragraph 68.A of this Consent Order, EPA reserves the right to bring an action against Respondent under CERCLA or other applicable law for recovery of any response cost incurred by the United States in connection with this Consent Order or the Site and not reimbursed by Respondent, including costs incurred if EPA conducts any of the Work required under this Consent Order.
 - C. Except for stipulated penalties that have been demanded by EPA and paid by Respondent pursuant to Section XIII of this Consent Order, EPA reserves the right to bring an action against Respondent to collect stipulated penalties assessed

pursuant to Section XIII (Stipulated and Statutory Penalties) of this Consent Order, and to seek penalties pursuant to Section 109 of CERCLA, 42 U.S.C. § 9609.

XV. OTHER CLAIMS

- 70. By issuing this Consent Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent.

 Neither the United States nor EPA shall be a deemed a party or be held out as a party to any contract entered into by Respondent or Respondent's directors, officers, employees, agents, successors, representatives, assigns, contractors or consultants in carrying out activities pursuant to this Consent Order.
- Not To Sue and Reservation of Rights), nothing in this Consent Order shall constitute or be construed as satisfaction of or release from any claim, cause of action, or demand in law or equity against the Respondent or any person, firm, partnership, subsidiary or corporation not a party to this Consent Order, for any liability such person may have under CERCLA, RCRA or other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under CERCLA Sections 106(a) and 107(a).
- 72. This Consent Order does not constitute a preauthorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2). Respondent waives any claim to payment under Sections 106(b), 111 and 112 of CERCLA, 42 U.S.C.

- Mazardous Substances Superfund arising out of any activity performed pursuant to this Consent Order. Respondent further waives all other statutory and common law claims against EPA including, but not limited to, contribution and counterclaims relating to or arising out of the implementation of the ground water monitoring program or the Removal Action.
 - 73. No action or decision by EPA pursuant to this Order shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).
 - 74. Respondent shall bear its own costs and attorney's fees.

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XVI. <u>INDEMNIFICATION</u>

75. Respondent agrees to indemnify, defend, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action: (A) arising from, or on account of, acts or omissions of Respondent or Respondent's officers, directors, employees, agents, contractors, subcontractors, receivers, trustees, successors or assigns, in carrying out activities pursuant to this Consent Order; and (B) for damages or reimbursement arising from or on account of any contract, agreement or arrangement between Respondent and any person for performance of Work on or relating to the Site, including but not limited to claims arising from construction delays, to the extent that such claims, causes of action, damages or reimbursements are

not caused by the negligence or willful misconduct of EPA or its agents, representatives or contractors.

- 76. Respondent agrees to pay the United States all costs incurred by the United States including, but not limited to, attorney's fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on the acts or omissions referred to in the preceding Paragraph except to the extent that such claims arise from the negligence or willful misconduct of EPA or its agents, representatives or contractors.
- 77. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from, or on account of, any contract, agreement or arrangement between Respondent and any person for performance of Work on or relating to the Site, including but not limited to claims on account of construction delays. Any claims that Respondent may have against EPA, its agents, representatives or contractors shall be resolved in accordance with the provisions and procedures of applicable laws, including the Federal Torts Claim Act.

XVII. INSURANCE

78. Prior to the commencement of any Work under this
Consent Order, Respondent shall secure, and shall maintain for
the duration of this Consent Order and for two (2) years after
issuance of both Notices of Completion by EPA pursuant to Section
XIX, herein, comprehensive general liability ("CGL") insurance

and automobile insurance with limits of \$2,000,000 combined single limit. The CGL insurance shall include contractual liability insurance in the amount of \$2,000,000 per occurrence.

79. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent needs provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor. At least seven (7) days prior to commencing Work under this Consent Order, Respondent shall provide EPA with certificates of the insurance required by this Section of the Consent Order, and a copy of each insurance policy if requested.

XVIII. MODIFICATION

- 80. Modifications to any work plan or schedule, including the Implementation Plan (Appendix 2) and the RAWP, may be made by mutual agreement by the EPA Project Coordinator and Respondent's Project Coordinator. Any approved modification under this Paragraph shall be in writing, shall specify the reasons for the modification and be signed by the Project Coordinators.
- 81. Except as provided in Paragraph 80 above, any other modification to a provision or requirement of this Consent Order shall be accomplished by an amendment executed by the signatories to this Consent Order.
- 82. No informal advice, guidance, suggestion or comment by EPA regarding reports, plans, specifications, schedules or any other writing submitted by Respondent shall be construed as

relieving Respondent of its obligation to obtain such formal approval as may be required by this Consent Order, and to comply with all requirements of this Consent Order unless it is formally modified under Paragraph 80 or unless revisions are appropriately executed under Paragraph 81 of this Consent Order. Any deliverable, plan, technical memoranda, report (other than progress reports), specification, schedule and attachment required by this Consent Order are, upon approval by EPA, incorporated into this Consent Order.

XIX. NOTICE OF COMPLETION

83. Respondent Notices of Completion.

- A. Following the completion of all Work required by
 this Consent Order concerning the Removal Action, Respondent
 shall notify EPA in writing and certify to the satisfaction of
 EPA that all such activities required under this Consent Order,
 including, with respect to the Removal Action, any additional
 Work, payment of Response and Oversight Costs and any stipulated
 penalties demanded by EPA, as they may have been modified as a
 result of the dispute resolution process pursuant to Section XI
 of this Consent Order, have been completed.
 - B. Following the completion of all Work required by this Consent Order concerning the ground water monitoring program under Paragraph 30.A, Respondent shall notify EPA in writing and certify to the satisfaction of EPA that all such activities required under this Consent Order, including, with respect to the ground water monitoring program, any additional Work, payment of Past Response Costs and Response and Oversight Costs and any

stipulated penalties demanded by EPA, as they may have been modified as a result of the dispute resolution process pursuant to Section XI of this Consent Order, have been completed.

C. The certifications under Paragraphs 83.A and B shall be signed by a responsible official representing Respondent. Respondent's official shall make the following attestation:

"I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved, the information contained in or accompanying this certification is true, accurate and complete."

For purposes of this Consent Order, a responsible official is a corporate official who is in charge of a principal business function.

84. EPA Notices of Completion.

- A. After receipt of Respondent's Notice of Completion under Paragraph 83.A, EPA shall issue a notice of completion to Respondent concerning the Removal Action when EPA determines that all Work related to the Removal Action has been fully performed in accordance with this Consent Order. If EPA fails to issue such notice of completion, or disapproves of Respondent's Paragraph 83.A notification, within one hundred eighty (180) days following EPA's receipt of Respondent's notification pursuant Paragraph 83.A, Respondent may dispute EPA's refusal or failure to make such a determination in accordance with Section XI (Dispute Resolution) of this Consent Order.
- B. After receipt of Respondent's Notice of Completion under Paragraph 83.B, EPA shall issue a notice of completion to Respondent when EPA determines that all Work related to the

ground water monitoring program has been fully performed in accordance with this Consent Order. If EPA fails to issue such notice of completion, or disapproves of Respondent's Paragraph 83.B notification, within one hundred eighty (180) days following EPA's receipt of Respondent's notification pursuant Paragraph 83.B, Respondent may dispute EPA's refusal or failure to make such a determination in accordance with Section XI (Dispute Resolution) of this Consent Order.

C. Notices of Completion issued by EPA under this
Paragraph 84 shall not effect or terminate Respondent's
obligations to comply with any continuing requirements of this
Consent Order (i.e., record preservation, indemnification,
-insurance), or EPA's reservation of rights under Section XIV of
this Consent Order.

XX. SEVERABILITY

85. If any judicial or administrative authority issues an order that invalidates any provision of this Consent Order or finds that Respondent has sufficient cause not to comply with one or more provisions of this Consent Order, Respondent shall remain bound to comply with all provisions of this Consent Order not invalidated or determined to be subject to a sufficient cause defense by the judicial or administrative authority's order.

XXI. EFFECTIVE DATE

86. This Consent Order shall become effective upon the date a fully executed copy of this Consent Order is received by Respondent.

. The undersigned representative of Respondent who has signed the signature page certifies that he/she is fully authorized to enter into the terms and conditions of this Consent Order and to bind Respondent to this document.

For Syntex Agribusiness, Inc.

Vice-President and Plant Manager

For the United States Environmental Protection Agency, Region VII

B¥:

Scott Pemberton

Senior Assistant Regional Counsel

- -- Office of Regional Counsel

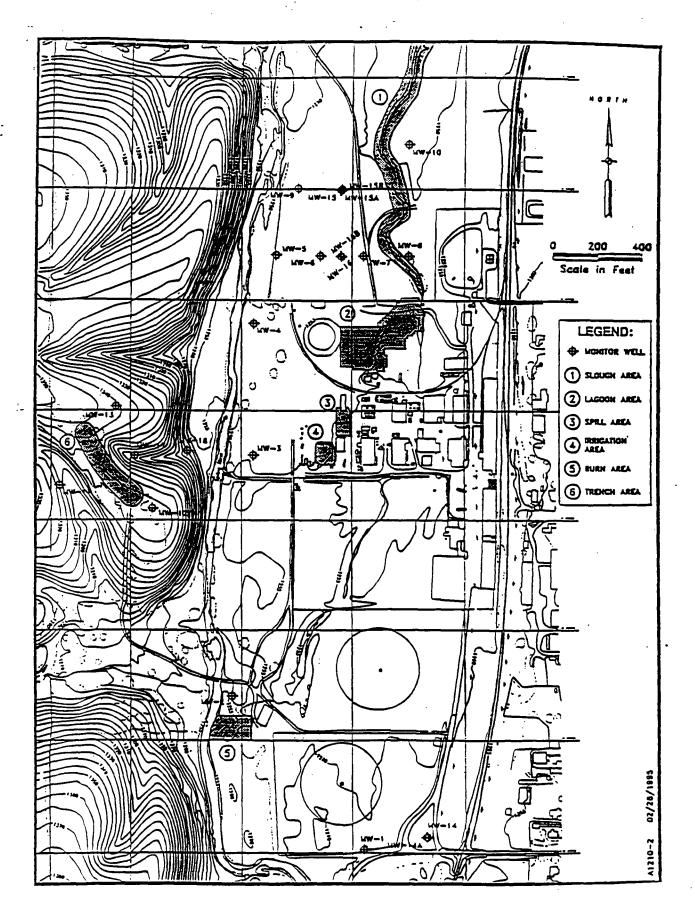
IT IS SO AGREED AND ORDERED.

Michael J./Sanderson

Director, Superfund Division

U.S. Environmental Protection Agency

Region VII



SITE MAP - SYNTEX FACILITY-VERONA

APPENDIX 3

REMOVAL ACTION STATEMENT OF WORK

SYNTEX FACILITY - VERONA VERONA, MISSOURI

Task 1 - Removal Action Work Plan.

- 1. Respondent shall develop a Removal Action Work Plan (RAWP) that describes in detail methods and procedures used in conducting the Removal Action to remove the polychlorinated biphenyl ("PCB") contamination at the Syntex Facility Verona Site. The RAWP shall include, at a minimum, the following information:
 - a. Brief background of the Site, including the physical location.
 - b. Method(s) to be used for characterizing, profiling, decontaminating and disposing of the PCB-contaminated materials.
 - c. Method(s) to be used for demolition of the electrical building, including material handling.
 - d. Method(s) to be used in soil excavation including loading, hauling and disposal.
 - e. Method(s) to be used to conduct perimeter air monitoring to assure protectiveness of the Removal Action.
- 2. The RAWP shall also describe in detail how Respondent will meet applicable and relevant and appropriate requirements (ARARS) and comply with Federal, state and local laws and regulations in conducting Work under this Consent Order.
- 3. The RAWP shall contain a time line identifying, at a minimum, dates of the following:
 - a. Expected mobilization date;
 - b. Expected time duration of removal activities;
 - c. Submission of the Sampling and Analysis Plan;
 - d. Submission of the Health and Safety Plan;
 - e. Submission of the weekly reports; and
 - f. Submission of the final removal action report.

Task 2 - Health and Safety Plan.

1. Respondent shall prepare a written Site Health and Safety Plan pursuant to Section VII, Paragraph 30.C of this Consent Order.

Task 3 - Sampling and Analysis Plan.

- 1. Respondent shall prepare a Sampling and Analysis Plan (SAP), to be included in the RAWP, that describes the approximate number, type and location of all samples and the type of analyses (including provision for split samples provided to EPA, its contractors or the State of Missouri if requested). Respondents shall provide EPA no less than five (5) days notice prior to any sample collection activity. The plan shall also include a list of laboratories that will be used for analysis, and how Respondent will comply with the requirements of Section VII, Paragraph 30.D of this Consent Order which apply to the PCB contamination. The plan shall also describe the general sampling scheme and method(s) used in characterizing the materials on-site for the purpose of making a waste determination.
- 2. Respondent shall perform all sample collection and analysis in compliance with EPA approved methods, including timing of analysis and documentation of sample collection, handling and analysis. Respondent shall refer to, at a minimum, the following guidance documents when preparing the SAP:
 - ▶ Compendium of ERT Field Analytical Procedures;
 - ▶ QA/QC Guidance for Removal Activities; and
 - Removal Program Representative Sampling Guidance, Volume 1: Soil.
 - 3. All sampling and analysis shall comply with the quality assurance procedures pursuant to Section VII, Paragraph 30.D of this Consent Order.

Task 4 - Removal Action.

1. The objective of the Removal Action is to remove the overall immediate threat posed by the PCB contamination located in the soil around the electrical building and potentially within the building itself. This action is necessary to reduce or eliminate the threat posed by the presence of hazardous substances. The Removal Action involves the removal and off-site disposal of those materials with significant levels of PCB contamination and demolition of the electrical building and associated concrete pad. The contaminated soil will be disposed in accordance with 40 C.F.R. § 761.60(a)(4) and 40 C.F.R. § 268.42(a)(2). Concrete and demolition debris contaminated with PCBs in concentrations of 50 ppm or greater will also be disposed in accordance with 40 C.F.R. § 761.60(a)(4) and 40 C.F.R. § 268.42(a)(2). In the

alternative with regard to concrete and demolition debris, Respondent may elect to decontaminate the materials in accordance with all applicable laws and regulations including the PCB regulations at 40 C.F.R. Part 761. Concrete and demolition debris with PCBs in concentrations of less than 50 ppm may be disposed in a Resource Conservation and Recovery Act ("RCRA") Subtitle D landfill as a solid waste. Metallic demolition materials with PCBs in concentrations of less than 50 ppm may be treated as scrap metal and sent to a re-melting furnace. Electrical components located in the electrical building may be moved and re-used if they contain PCB concentrations under the levels established at 40 C.F.R. § 761.125(c)(3).

- 2. Respondent shall characterize, profile and dispose of the PCB-contaminated materials. The materials shall be disposed in accordance with the Toxic Substances Control Act (TSCA) and/or RCRA and associated regulations at 40 C.F.R. Part 761, Subpart D and 40 C.F.R. Part 268.
- 3. Respondent shall demolish the electrical building, and shall characterize, profile, dispose and/or decontaminate and dispose of the building components. Some materials may be able to be decontaminated and then recycled. If the materials cannot be decontaminated, and if they contain PCB concentrations of 50 ppm or greater, they shall be sampled and disposed of as a TSCA regulated waste in accordance with 40 C.F.R. § 761.60(a)(4) subject to any applicable land disposal restriction of RCRA. Materials with PCB concentrations less than 50 ppm may be disposed in a RCRA Subtitle D landfill or re-melted (metals). Electrical components from the building may be re-used if they contain PCB concentrations under the levels established at 40 C.F.R. § 761.125(c)(3). Respondent shall use appropriate dust control measures during building decontamination and demolition.
 - 4. Respondent shall excavate, load, haul and remove all soils that exceed the EPA established action level for this Site. All contaminated soil shall be removed in lifts, the depth of which shall be approved by the EPA. The resulting excavations shall be sampled until it is determined that all soil remaining is below the action level. Consistent with the PCB Spill Cleanup Policy contained in Subpart G of 40 C.F.R. Part 761, the action level for the Syntex Verona Facility is 25 parts per million for PCBs. The sampling scheme for the soils shall be approved by the EPA.
 - 5. Respondent shall conduct perimeter air monitoring throughout the Removal Action to ensure that no contaminants are leaving the Site. Appropriate safety controls shall be put in place to ensure pedestrian safety during the Removal Action.
 - 6. During excavation, stockpiling or any other such handling of contaminated soil, Respondent shall provide dust control measures

to prevent off-site migration of significant quantities of contaminated dust. If water is used as a dust control measure, then appropriate care must be taken to ensure that no clean areas are contaminated as a result of transporting soil from the excavation to the stockpile.

- 7. Respondent shall ensure that any soil stockpiled at the Site is stockpiled in a known contaminated area or is stored to prevent contamination of clean areas. The stockpiled soil must be completely covered with plastic sheeting at all times when loading or stockpiling activities are not being conducted. Care must be taken to assure that no clean area is contaminated as a result of transporting soil from the excavation to the stockpile.
- 8. Respondent shall ensure that loading and transportation of materials from this Site is conducted in accordance with Federal, state and/or local rules and regulations governing the mode of transport to be used. Extreme care shall be taken to load and cover materials so that no release of materials does occur during transport. If a release of materials does occur suring transport, Respondent shall take immediate actions to control and/or mitigate the release and to notify the appropriate regulatory authorities. In addition, Respondent shall notify the EPA Project Coordinator within 24 hours of such release.
 - 9. Respondent shall ensure that disposal of materials will occur at a disposal facility that is approved by the EPA Project Coordinator and is in compliance with the CERCLA Off-site Rule, 40 C.F.R. Section 300.440. All waste materials, whether hazardous or non-hazardous, shall be tracked and documented from point of origin (the Site) to the point of ultimate disposal.
 - 10. Respondent shall ensure that all Site-derived wastes are managed and disposed of as either hazardous waste, PCB waste, special waste, and/or solid waste as required by law or regulation in accordance with the rules and regulations of the state of Missouri and/or the state where the material is to be disposed. If the state where disposal will occur has no such rules and regulations, Federal rules shall apply.
 - 11. Respondent shall comply with all ARARs as identified in the Removal Action Decision Document (Appendix 4 to this Consent Order) for this Site, to the extent practicable considering the exigencies of the situation. The EPA will make the determination as to whether compliance with ARARs is practicable. Respondent and their representatives shall comply with all local, state and Federal rules and regulations when conducting activities offsite.
 - 12. Respondent shall ensure that the following restoration activities occur unless the EPA Project Coordinator approves a deviation from the following:

- a. Placement and proper compaction of clean soil in the excavated area(s). The "clean" soil must be sampled to show that it is below 1 part per million PCB concentration. The top 4 to 6 inches of the replacement soil must be fertile topsoil capable of sustaining vegetation; and
- b. Re-vegetation and grading of the clean soil to provide appropriate drainage.

Task 5 - Reporting.

- 1. Respondent shall prepare and submit weekly progress reports to EPA addressing the Removal Action, beginning one week after Respondent's receipt of the Authorization to Proceed to be issued by EPA pursuant to Section VII, Paragraph 28 of this Consent Order, and concluding when all activities with regard to the PCB contamination have been completed pursuant to this Consent Order. Each report shall provide, at a minimum, a detailed account of the activities for the previous week, activities clanned for the upcoming week, activities required for project completion including dates, any problems encountered during the reporting period with solutions and any anticipated future problems with solutions. Each report shall be submitted to EPA no later than the Tuesday immediately following the reporting period.
 - 2. Respondent shall prepare a Final Report that summarizes all activities conducted at the Site during this Removal Action. The report shall be due to EPA no later that ninety (90) days after completion of all work associated with the PCB contamination required by this Consent Order. The report shall include, at a minimum, the following:
 - a. Copies of all hazardous waste manifests or other appropriate shipping papers that describe the origin and destination, amount and description of all waste materials being transported off-site. The shipping papers must also identify the transporter, the date the materials were shipped and the date the materials were received by the ultimate disposal facility. All shipping papers must be signed by the generator (Respondent), the transporter and the disposal facility;
 - b. Copies of all results of chemical or physical analyses conducted during the Removal Action, including the results of any field screening or other "on-site" analyses;
 - c. Copies of any and all sampling documentation including field sheets and chain-of-custody sheets; and
 - d. Copies of any and all pertinent photographs taken during removal activities.

APPENDIX 4

APPENDIX 4



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII 726 MINNESOTA AVENUE KANSAS CITY, KANSAS 66101

JUL 1 7 1997

ACTION MEMORANDUM/ENFORCEMENT

SUBJECT: Request for Removal Action at the Syntex Facility -

Verona Site in Verona, Missouri

Steven L. Sanders FROM:

Remedial Project Mariage

Steve Kovac, Chief faul forde THRU:

Missouri/Kansas Remedial Branch

Michael J. Sanderson

Superfund Division

- OT :-Dennis Grams, P.E.

Regional Administrator

Site ID#: 51 Syntex Facility - Verona Category of Removal: Time-Critical

I. **PURPOSE**

The purpose of this Action Memorandum is to request and document approval of the proposed time-critical removal action described herein for the Syntex Facility - Verona site, Verona, Lawrence County, Missouri. The Syntex Facility - Verona site is a site where an ongoing remedial action addressing tetrachlorodibenzo-p-dioxin (dioxin) contamination is nearly complete, but polychlorinated biphenyls (PCBs) have recently been discovered in a small localized area of the site. The removal action will be conducted by Syntex Agribusiness, Inc., (Syntex).

The action proposed herein is consistent with the two Records of Decision (RODs) for the Syntex Facility - Verona site which were issued on May 5, 1988, for operable unit one (OU 1) and May 7, 1993, for operable unit two (OU 2). The ROD for OU 1 addresses soil and equipment contaminated with dioxin. The ROD for OU 2 addresses ground water contamination.



"IF. SITE CONDITIONS AND BACKGROUND

A. SITE DESCRIPTION

1. Removal Site Evaluation.

In the 1960s, Hoffman-Taff, Inc., owned and operated the facility. Hoffman-Taff produced 2,4,5 Trichlorophenoxy-acetic acid (2,4,5-T) for the U.S. Army as part of the production of the defoliant commonly known as Agent Orange. In 1968, Hoffman-Taff leased a portion of the building at the facility to Northeastern Pharmaceutical and Chemical Company (NEPACCO) for the production of hexachlorophene. In 1969, Syntex purchased the facility at Verona from Hoffman-Taff. In 1996, Syntex sold the facility to DuCoa, L.P. (DuCoa), a Dupont, ConAgra limited partnership.

The production of 2,4,5-T and hexachlorophene involved the intermediate production of 2,4,5-Trichlorophenol (TCP) and subsequently the potential formation of 2,3,7,8 tetrachlorodibenzo-p-dioxin (dioxin). These materials were removed from the pharmaceutical grade hexachlorophene, thus producing waste streams containing TCP and dioxin. These waste streams were managed in storage tanks and lagoons onsite.

The site was placed on the proposed National Priorities List (NPL) on December 30, 1982 (Federal Register Volume 47, Number 251). On September 8, 1983, the NPL designation became final (Federal Register Volume 48, Number 175). The principal threats posed by the site were direct contact (ingestion, inhalation and dermal) with dioxin-contaminated soil and wastes by humans and wildlife. The dioxin-contaminated soils, liquids, and sludges were also a potential source for groundwater contamination.

A small electrical building at the site formerly housed transformers containing oils with PCB compounds and some amount of leakage from the transformers occurred inside the building. The transformers were removed in the 1980s, and the floor of the electrical building was sealed and maintained to avoid any contamination problems. No further problems were encountered concerning PCB contamination. Recently, the new owner of the facility, DuCoa, wanted to remove the overhead power lines and bury the power lines onsite. To complete this task, excavation of a trench was initiated in April 1997. The excavated soil was analyzed for PCBs due to the knowledge that transformers had previously been stored in the small electrical building. The results of the analysis discovered PCBs in the soil at a concentration of one thousand (1000) milligrams/kilogram

... (mg/kg)[this is equivalent to 1000 parts per million (ppm)], well
above health-based levels of concern.

This is a time-critical removal. The CERCLIS ID number for the Syntex Facility - Verona is MOD007452154.

2. Physical Location.

The Syntex Agribusiness, Inc., (Syntex) facility is located west of the city of Verona, in south-central Lawrence County in southwest Missouri. The facility occupies approximately 180 acres, primarily along the east bank of the Spring River, which flows northward through the length of the property.

3. Site Characteristics.

The site currently consists of several connected, manufacturing and warehouse buildings located at the edge of a rural residential area. Most of the active portion of the facility is located within protected areas of the 100-year Spring River floodplain. The area is characterized by karst topographic features such as solution cavities and springs.

The industrial facility is surrounded on three sides by property used for agricultural purposes. To the east of the site are the residential areas of the city of Verona. Scattered residences are located within the Spring River floodplain down gradient from the site. The Spring River is used for recreational and industrial purposes within southwestern Missouri. The area to be addressed by this removal action includes a small electrical building and the areas surrounding the building.

4. Release or Threatened Release into the Environment of a Hazardous Substance, Pollutant or Contaminant.

PCBs are a hazardous substance as defined in Section 101(14) of CERCLA and listed at 40 C.F.R. Section 302.4. Investigations at the Syntex Facility - Verona Site have shown PCB levels as high as 1000 ppm. Contamination has currently been detected in only a very small area approximately twenty square feet in size.

¹ It is important to note that the active portion of the facility currently has a RCRA permit and is separate and distinct from the historical activities which lead to the site becoming a Superfund site.

Additional characterization will be necessary to delineate the extent of the contamination. The PCB contamination is thought to be a result of leaking transformers in an immediately adjacent small electrical building. Migration of PCB-contaminated soil may occur by erosional and depositional processes as well as by entrainment. Exposure to humans may occur through interaction with contaminated soils.

5. National Priorities List Status.

This site is currently listed on the National Priorities List.

6. Supporting Documentation.

Results of investigations, reports of sampling and analyses, and other relevant documents regarding the contamination at the site are contained in the Administrative Record for the site.

B. OTHER ACTIONS

Previous Actions.

The EPA and Syntex entered into an administrative order on consent in September 1983, pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606, and Section 3013 of RCRA, 42 U.S.C. § 6934. The order required the following actions:

- posting of warning signs around specified disposal areas;
- development and submittal of a Sampling and Analysis Plan (SAP) to define the nature and extent of dioxin contamination;
- implementation of the SAP upon approval by EPA;
- development and submittal of a Fish and Sediment Sampling Plan (FSSP) upon approval by EPA;
- implementation of the FSSP upon approval by EPA;
- preparation and submittal of a Remedial Alternatives
 Report; and
- preparation and submittal of an Implementation Plan that would include plans and specifications for the

preferred remedial alternative(s), schedule for implementation and reporting, description of the necessary reports and safety plans.

In 1988, the EPA decided to divide the site into two separate operable units. The contaminated soils and equipment were addressed under OU 1, while the ground water contamination was addressed by OU 2.

In May 1988, EPA issued a Record of Decision (ROD) for OU 1 that selected a remedial action for cleanup of contaminated soils and the NEPACCO and photolysis equipment (equipment) at the facility, and associated ground water monitoring. Pursuant to the 1983 administrative order, EPA, the Missouri Department of Natural Resources (MDNR) and Syntex developed an Implementation Plan to achieve the clean-up measures proposed in the ROD for OU 1.

The selected remedy under OU 1 was to provide protection of the environment by preventing the mobilization of dioxincontaminated soils to the Spring River. Protection to human health would be accomplished by preventing exposure to contaminated materials through soil removal, decontamination and disposal of equipment, and capping of contaminated areas.

Dioxin-contaminated soils in excess of a 20 parts per billion (ppb) action level would be removed and treated.

Clean-up measures began in June 1988, with the excavation of dioxin-contaminated soils at four former storage areas within the Spring River floodplain. The four areas included the Burn area, the Irrigation area, the Lagoon area and the Slough area. Approximately 860 cubic yards of dioxin-contaminated soil was transported to the EPA Mobile Incineration System and thermally treated. The excavated areas were then backfilled with clean topsoil and a vegetative cover was established. Remediation of these contaminated soils was completed in 1989.

Dioxin-contaminated soils located in the Trench area on bluffs west of the Spring River were capped in place with a 12-inch topsoil layer which supports a vegetative cover. In addition, a gravel drainage interception trench was installed up gradient from the trench area to restrict contaminant migration. Five ground water monitoring wells were installed around the Trench area for post soil remediation ground water monitoring. The monitoring well configuration consists of an up gradient well (MW-11), two down gradient wells (MW-17, MW-18), and two flanking down gradient wells (MW-12, MW-13). Wells MW-17 and MW-18 were

completed in bedrock and screened across the alluvium/bedrock contact. The activities associated with the Trench area were also completed in 1989. In 1996, additional work was initiated to replace several wells around the Trench area as well as install wells in order to better collect information regarding the ground water around the Trench area. Wells MW-12, MW-13, and MW-17 were replaced with closely located similar wells. Well MW-18 was modified and two new wells were installed. Well MW-19 was installed as a new down gradient well and well MW-20 was installed as a new up gradient well. There are now seven wells surrounding the Trench area (MW-11, MW-12, MW-13, MW-17, MW-18, MW-19 and MW-20).

In 1995, all equipment and debris was removed from the Spill area and the area was covered with an asphalt cap. No excavation was required in this area because the concentration of dioxin contamination was below the 20 ppb action level. The original plan called for a vegetative cap, but the owner wished to use the area for parking and movement of vehicles and equipment so an asphaltic cap was substituted. The EPA and the State agreed that this cap would be just as protective as a vegetative cap. The cap will be maintained in perpetuity.

Decontamination procedures were developed to clean the contaminated NEPACCO and photolysis equipment. The procedures were implemented and approximately 75 percent of the equipment was treated. The land disposal restrictions posed problems in the disposal of the treated equipment. In 1996, a determination was made by EPA, under the hazardous debris rule, that the developed procedures would adequately protect human health and the environment and allow the treated equipment to be disposed as a solid waste. All of the equipment has been properly treated and disposed.

An eight-foot chain link fence was erected around the perimeter of the site to limit access. Land use restrictions have been placed on the title to the facility's property to maintain the industrial use status.

The EPA issued a ROD for OU 2, in April 1993 which stated that no further action would be taken with respect to the ground water contamination at the Syntex Verona site. The ROD for OU 2 stated that ground and surface water monitoring would be conducted for two years and an assessment would be done to ensure that the remedy remains protective of human health and the environment.

The state of Missouri has also implemented institutional controls on the site limiting changes in land use by placing the site on a state registry. The Syntex Verona site has been placed on the state of Missouri's Registry of Abandoned or Uncontrolled Hazardous Waste Disposal Sites as the "Syntex Facility (Verona) Site". The site is currently classified on the Registry as a Class "II" site, priority 11, meaning it is the eleventh priority of the class II sites. Class II sites are sites that are a significant threat to the environment where action is required. Missouri Code section 260.465 describes the authority of the Missouri Department of Natural Resources with respect to use and transfer of sites on the Registry of Abandoned or Uncontrolled Hazardous Waste Disposal Sites. There are no specific restrictions for this site. In summary, a person shall not substantially change the manner in which a Registry site is used or sell or transfer title of a Registry site without written approval of the Director of the Missouri Department of Natural Resources.

2. Current Actions.

At this time the EPA is negotiating an Administrative Order on Consent for Response Activities (AOC) with Syntex for the completion of the remainder of the work at the site. The remainder of work will include the installation of at least two new ground water monitoring wells and ground water monitoring for two years, and the removal of the PCB contamination. Since the discovery of the PCB contamination, Syntex has fenced the area around the excavated trench and posted warning signs to prevent exposure. In addition, Syntex has continued monitoring the existing ground water wells.

C. STATE AND LOCAL AUTHORITIES' ROLE

1. State and Local Actions to Date.

The EPA has worked closely with representatives of the state of Missouri in planning for all actions taken at the Syntex Facility-Verona site.

2. Potential for Continued State/Local Response.

The primary role of the State in this removal action will be to continue to review the proposed action and continue to coordinate with the Remedial Project Manager (RPM). The appropriate local response authorities will be contacted prior to transportation in accordance with the health and safety plan.

III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT AND STATUTORY ENVIRONMENT AND REGULATORY AUTHORITY

A. THREATS TO PUBLIC HEALTH OR WELFARE

The present site conditions pose an imminent and substantial endangerment to public health or welfare which meets the criteria for response actions under 40 C.F.R. Section 300.415(b)(2) of the National Contingency Plan (NCP), as follows:

1. Actual or Potential Exposure to Nearby Human Populations. Animals or the Food Chain from Hazardous Substances, or Pollutants or Contaminants.

The investigations conducted by Syntex has confirmed the presence of PCB contamination at 1000 mg/kg in soil down gradient of the electrical building.

The portion of the facility where the contamination is

Tocated is completely within the fenced area of the site so exposure to local residents is not likely. However, workers could easily be exposed to high levels of PCB contamination. The PCBs can be absorbed through the skin and may cause liver damage. Systematic poisoning symptoms include nausea, vomiting, loss of weight, jaundice, edema and abdominal pain. The PCBs are suspected to cause reproduction abnormalities in humans and mammals. The PCBs can accumulate in the food chain.

Routes of exposure for PCBs include inhalation of PCB-contaminated dust, and direct contact with and ingestion of PCB-contaminated dust and soil.

2. <u>High Levels of Hazardous Substances or Pollutants</u> or Contaminants in Soils Largely at or Near the Surface, That May Migrate.

The Syntex investigations have confirmed soil samples which contain 1000 mg/kg of PCB contamination located in the top twelve inches of the soil immediately north of the electrical building. This contamination is subject to migration by entrainment, windblown deposition and surface runoff.

The PCB Spill Policy at 40 C.F.R. Section 761.125(c)(3)(v) specifies that for restricted access areas soil must be remediated to twenty-five (25) ppm PCBs by weight.

The PCB Spill Policy at 40 C.F.R. Section 761.125(c)(3)(iv) specifies that low contact, outdoor surfaces shall be cleaned to a PCB concentration of one hundred micrograms per one hundred square centimeters (100 ug/100 cm²). However, for this removal the building will be removed.

3. Weather Conditions That May Cause Hazardous Substances or Pollutants or Contaminants to Migrate or be Released.

Weather conditions may cause the PCBs to migrate or be released. The trench is subject to the elements. Wind or rain may cause PCBs to migrate to other areas of the facility. In addition, the site is located within the floodplain of the Spring River and the PCB contamination could be subject to migration by flooding.

B. THREATS TO THE ENVIRONMENT

Present site conditions pose an imminent and substantial endangerment to human health and the environment which meet the criteria for response actions under 40 C.F.R. Section 300.415(b)(2) of the NCP, as follows.

1. Actual or Potential Exposure to Nearby Human Populations, Animals or the Food Chain from Hazardous Substances or Pollutants or Contaminants.

The Agency for Toxic Substances and Disease Registry (ATSDR) has reported adverse effects of PCBs on unborn animals at ingestion dosages of approximately 3 to 13 mg/k/day for acute exposure, and death in animals at ingestion dosages of approximately 750 mg/kg/day for acute exposures.

For chronic exposures (greater than 14 days), ATSDR reports effects on unborn and newborn animals at ingestion dosages of approximately 0.005 to 0.1 mg/kg/day; liver and skin damage and death are reported at ingestion dosages of approximately 0.1 mg/kg/day.

For acute exposures, ATSDR reports death in animals at skin contact dosages of approximately 1,250 mg/kg/day. For chronic exposures, liver and kidney damage is reported at skin contact dosages of approximately 100 mg/kg/day.

The levels of PCB contamination in the surface soils next to the electrical building present a potential health problem to animal life that would come into contact with the contamination in this area.

IV. PROPOSED ACTION AND ESTIMATED COSTS

A. Proposed Action

1. Proposed Action Description

This action will remove the immediate threat posed by PCB contamination located around the electrical building. More specifically this action entails:

- * Preparation of a Health and Safety Plan for the site removal action including worker protection and safety requirements;
- * Preparation of a Sampling and Analysis Plan to determine the extent of the PCB contamination. This will include sampling of the electrical building and the areas surrounding it. Soil and wipe sampling will be performed in accordance with approved sampling methodologies. For wipe sampling the methodology will be in accordance with 40 C.F.R. § 761.123;
- * Characterization and removal of the electrical building and any contaminated debris surrounding the building. The building and any other debris will be disposed, or decontaminated and reused or disposed, in accordance with the PCB Spill Policy at Subpart G of 40 C.F.R. Part 761, specifically Section 761.125(a)(2). All of the debris contaminated with PCBs as defined by 40 C.F.R. § 761.125(c)(3), will be incinerated or disposed in accordance with 40 C.F.R. §§ 761.60(d)(2) and 761.60(a)(4);
- * Characterization and removal of contaminated soil around the electrical building. The characterization will be in accordance with the approved sampling and analysis plan. Removal of soil will be in accordance with the restricted access guidelines found in the PCB Spill Cleanup Policy at Subpart G of 40 C.F.R. Part 761. For such areas, the policy specifies that soil must be decontaminated (or removed) to 25 ppm PCBs. The removed material will be incinerated or disposed in accordance with 40 C.F.R. Part 761.60(a)(4); and

* Perimeter air monitoring will be conducted throughout the removal action to ensure that no contaminants are leaving the site. Appropriate safety controls will be put into place to ensure the safety of the workers at the DuCoa plant during the entire removal action.

2. Contribution to Remedial Performance

This action will contribute to the overall remediation of the Syntex Facility-Verona site by addressing the threat posed by the PCB contamination. All other threats posed by the site have been or are being addressed by the ongoing remedial actions outlined in section II(B) of this action memorandum. The proposed action will ensure that the threat posed by the PCB contamination is adequately abated. The proposed action will be consistent and will not interfere with the ongoing remedial actions at the site.

3. Description of Alternative Technologies

Incineration may be used to dispose of portions of the PCB-contaminated materials during this removal action (see Section IV(A)(1) above). This is a preferred alternative to land disposal.

4. Applicable or Relevant and Appropriate Requirements

Section 300.415(I) of the National Contingency Plan (NCP) requires removal actions to attain applicable or relevant and appropriate requirements (ARARs) under federal or state environmental laws to the extent practicable considering the exigencies of the situation. Other state and federal advisories, criteria or guidance may be considered in formulating the removal action. In determining whether compliance with ARARs is practicable, EPA may consider factors such as the urgency of the situation and the scope of the removal action to be conducted.

a. Federal Action Specific Requirements

i. These requirements may apply to the transportation of PCB-contaminated materials:

Regulatory Citation	Requirement
40 C.F.R. §§ 761.207, 262.20 and 262.23	Requirements for manifesting
40 C.F.R. § 262.30	Requirements for packaging of materials
40 C.F.R. § 262.31 49 C.F.R. §§ 173.202 and 173.241	Requirements for labeling materials
40 C.F.R. §§ 262.32 and 761.40	Requirements for marking of materials

ii. These requirements may apply to the disposal and verification sampling of the PCB-contaminated materials:

	Regulatory Citation	<u>Requirement</u>
ens mã	40 C.F.R. § 761.60	Methods for disposal of PCB-contaminated materials.
	40 C.F.R. § 761.130	Requirements for verification sampling after cleanup of PCB contaminated materials.
	40 C.F.R. § 264.114	Requirements for equipment decontamination.
	40 C.F.R. Part 268	Land Disposal Restrictions.

- b. Federal Chemical-Specific Requirements
- i. The following requirements may be applicable to the PCB contaminated materials:

Regulatory Citation	Chemical	Maximum Concentration
40 C.F.R. § 761.125(c)(3)(iv)	PCBs	100 ug/100 cm² for low contact outdoor surfaces

40 C.F.R. § 761.125(c)(3)(v)	PCBs	25 ppm PCBs by weight for soils
'40 C.F.R. Part 268	PCBs	Land Disposal Restrictions

- c. Potential State-Identified Action Specific Requirements
- i. The following requirements may apply to activities involving the generation of airborne pollutants during excavation and loading activities:

	Regulatory Citation	Requirement
	10 CSR 10-6.170(1)	Restriction of fugitive particle matter emission.
· *** *	10 CSR 10-6.060(11)(B)	Limitation on Ambient Air Quality impacts of various pollutants.
enterenterente	10 CSR 10-6.060(8)(B)	Must apply BACT for each pollutant that it would emit in a significant amount.
	10 CSR 10-6.060(8)(C)(7)	Requirement for ambient air monitoring to determine the effect emissions are having on air quality.
·	10 CSR 10-6.060(11)(C)	Guidelines for collecting valid data for total suspended particulates.

ii. These requirements may apply to the transportation of PCB-contaminated materials:

Regulatory Citation	Requirement
10 CSR 25-6.263(2)(A)(3)	Requirement to use licensed hazardous waste transporters.
10 CSR 25-6.263(2)(A)(5-7)	Vehicle marking, loading and waste compatibility requirements.

10 CSR 25-6.263(2)(B)1.B	Requirements for drivers to perform daily inspection of vehicles.
10 CSR 25-6.263(2)(A)(4)	Requirement to provide minimum insurance coverage on vehicles.
10 CSR 25-6.263(2)(A)(2)	Requirement for transportation equipment and vehicles to comply with safety standards.
10 CSR 25-6.263(2)(C)	Requirement for notification in the event of a spill.

- d. Potential State-Identified Chemical-Specific Requirements
- i. The following requirements may be applicable to any potential source of air pollutants:

Regulatory Citation	Chemical	Maximum Concentration
10 CSR 10-6.060(11)(B)	Total Suspended Solids	10 ug/DSCM 24-hour

5. Project Schedule

The start-up of this project will begin as per the schedules identified in the Administrative Order on Consent for Response Activities (AOC) once the AOC is finalized. It is anticipated that the removal action will begin soon after approval of this Action Memorandum and will take approximately six weeks to complete. It is anticipated that the action will begin by August 11, 1997.

B. Estimated Costs

Syntex will be performing this removal action. The oversight costs incurred by the government during this removal action will be reimbursed by Syntex in accordance with the AOC. The government has no plans to have contractor oversight during the removal action, so all government costs will be intramural costs.

V. EXPECTED CHANGE IN THE SITUATION SHOULD NO ACTION BE TAKEN OR DELAYED

Without the response action proposed in this document, the contamination is likely to migrate or spread or otherwise be released into the environment. In such an event, there will be an increased threat to human health and the environment.

VI. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this action.

VII. ENFORCEMENT

See attached Confidential Enforcement Addendum.

VIII. RECOMMENDATION

This Action Memorandum documents the removal action for the Syntex Facility-Verona site including removal and disposal of PCB-contaminated materials from the site. The selected action is in accordance with CERCLA, as amended, is not inconsistent with the NCP, and is consistent with the ongoing remedial actions at the site. This decision is based on the Administrative Record for the site.

Because conditions at the site meet the criteria for a removal action set out in the NCP, Section 300.415(b)(2), I recommend your approval of the removal action.

Approved:

Attachments

Dennis Grams, P.E.

Regional Administrator

Date